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## WEST Search History





DATE: Wednesday, August 18, 2004

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L64	20010101	22
<input type="checkbox"/>	L63	L62 and (crypto\$6 or encrypt\$7 or encod\$7 or enciph\$8)	50
<input type="checkbox"/>	L62	wireless adj bridge\$1	117
<input type="checkbox"/>	L61	wireless near3 interface near3 cryptographic\$4	2
<input type="checkbox"/>	L60	"wireless network interface" with cryptographic\$4	0
<input type="checkbox"/>	L59	L58	0
		<i>DB=USPT; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L58	"wireless network interface" with cryptographic\$4	0
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L57	20010101	5
<input type="checkbox"/>	L56	"network card" and "cryptographic processor"	17
<input type="checkbox"/>	L55	"network card" same "cryptographic processor"	0
<input type="checkbox"/>	L54	"network card" with "cryptographic processor"	0
<input type="checkbox"/>	L53	l47 and "cryptographic processor"	0
<input type="checkbox"/>	L52	20010101	6
<input type="checkbox"/>	L51	200101	0
<input type="checkbox"/>	L50	L48 and l47	60
<input type="checkbox"/>	L49	L48 with l47	0
<input type="checkbox"/>	L48	(crypto\$7 or encipher\$8 or encod\$8 or encrypt\$7)	535659
<input type="checkbox"/>	L47	"wireless network interface card" or wnic	355
<input type="checkbox"/>	L46	l42	21
		<i>DB=USPT; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L45	L44 and l43	8
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<input type="checkbox"/>	L43	20010101	15
<input type="checkbox"/>	L42	"wireless network interface card"	21
<input type="checkbox"/>	L41	L40 and wireless adj network	10
<input type="checkbox"/>	L40	hall.in.	9934
<input type="checkbox"/>	L39	l36 and wireless near3 transceiver	2
<input type="checkbox"/>	L38	L37 and "james bergman"	0

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<input type="checkbox"/>	L34 L33 and wireless	2
<input type="checkbox"/>	L33 L32 and cryptographic	12
<input type="checkbox"/>	L32 media adj access adj controller	894
<input type="checkbox"/>	L31 media adj access adj controll\$4	904
<input type="checkbox"/>	L30 20010101	8
<input type="checkbox"/>	L29 l28 and (crypto\$7 or encrypt\$6 or enciph\$7 or encod\$6 or decrypt\$7 or deciph\$8 or decod\$7)	10
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<input type="checkbox"/>	L27 L26 and PCMCIA	8
<input type="checkbox"/>	L26 L25 and (crypto\$7 or encrypt\$6 or enciph\$7 or encod\$6 or decrypt\$7 or deciph\$8 or decod\$7)	43
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	(5539824 6694430 5425103 5619576 6304973 6088585 5787177 5974149 6189104 5070528 5235644 5594869 5757924 5920640 6069970 6151679 6240513 5748734 5982895 6073237 6169802 6199086 5636216 5231662 5764765 6002772 6189032 6397336 5628055 5844400 5999140 5253294 5499296 5684948 5687235 5796833 5818936 5901227 5956407 5958051 5974151 6021491 6035398 6157721 6160891 6161180 6230266 6243812 6292569 6367013).pn. (5469332 5481611 5513181 5598476 5619575 5649014 5952963 5978481 6233337 6266411 6266717 6332133 6377687 6418224 6430170 6766453 6778779 6098330 5664016 6006100 5007089 5276680 5347545 5386438 5467341 5490175 5509027 5513210 5564055 5574979 5583866 5657317 5694417 5696903 5706428 5712870 5745699 5745884 5768531 5867131 5898690 5949776 5952970 5956408 5982807 5987057 6014087 6035324 6041042).pn.	99
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<input type="checkbox"/>	L21 cryptographic adj processor	141
<input type="checkbox"/>	L20 wireless with cryptographic adj processor	0
<input type="checkbox"/>	L19 L17 and encrypt\$8	5
<input type="checkbox"/>	L18 L17 and crypto\$7	0
<input type="checkbox"/>	L17 20010101	19
<input type="checkbox"/>	L16 4534061.pn.	1
<input type="checkbox"/>	L15 L14 and wireless near3 lan	28
<input type="checkbox"/>	L14 "baseband processor"	514
<input type="checkbox"/>	L13 "wireless lan housing"	1
<input type="checkbox"/>	L12 l11 and security	14

<input type="checkbox"/>	L11	20010101	21
<input type="checkbox"/>	L10	"wireless lan transceiver"	26
<input type="checkbox"/>	L9	L8 and crypto\$6	6
<input type="checkbox"/>	L8	wireless near3 LAN near3 (device or housing)	186
<input type="checkbox"/>	L7	wireless near3 housing near4 (pcmcia near3 connector)	0
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<input type="checkbox"/>	L6	20010101	20
<input type="checkbox"/>	L5	L4 and battery	65
<input type="checkbox"/>	L4	L3 and tamper\$5 with resistant	127
<input type="checkbox"/>	L3	L2 and security	5574
<input type="checkbox"/>	L2	wireless with ("local area network" or LAN)	20922
<input type="checkbox"/>	L1	wireless and ("local area network" or LAN)	39637

END OF SEARCH HISTORY



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Jul 6, 10:24 PM

## Harris wins \$23 million NSA contract

BY BRIAN MONROE  
 FLORIDA TODAY

MELBOURNE -- Harris Corp. has won a potential \$23 million contract from the National Security Agency for its SecNet 11 secure wireless network cards that can send encrypted data, voice or video transmissions.

The Melbourne-based communications-electronics manufacturer, which employs 6,100 people in Brevard County and 10,000 companywide, has the only National Security Agency-certified secure wireless card that can transmit at a data rate of 11 megabits per second. That is faster than typical high-speed cable connections of 10 megabits per second. A dial-up modem has only 0.056 megabits (or 56 kilobits) per second.

The contract has an initial \$1.2 million order. In the award, Harris will supply personal computer cards, wireless bridges and auxiliary equipment such as cables to U.S. government departments or agencies and their contractors, NATO, and foreign military customers with valid communications security accounts through the National Security Agency.

Experts say, while the contract amount isn't huge by Harris standards -- the company has landed deals in the billions of dollars -- it is significant because it shows Harris is trying to strengthen its ties to other government sectors not tied to defense.

"Harris is trying to diversify more of its government work," said Lawrence Harris, a telecommunications-equipment analyst for Oppenheimer & Co., in New York. "They become a little less dependent on the Department of Defense."

That is important, the analyst said, because the company realizes the current rise in defense spending eventually will begin to wane, and it will have to rely on its currently struggling commercial divisions and other government-related contracts.



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Lawrence Harris said many networks "do have issues relative to security. The government doesn't want someone next door tapping into what should be a secure network. As a consequence, I think Harris could get additional contracts with the government in that area."

To land a contract with the National Security Agency also "illustrates the fact that Harris technology is highly regarded by some of the top intelligence agencies in the country. Roughly 40 percent of the sales within the company's government communications division is of a classified nature."

Harris officials also think the strategy is cost-effective.

By embedding an encryption module into the network access card, the need for externally wired equipment is eliminated and users have the ability to quickly assemble a network and maintain "wireless communications-on-the-move," anywhere in the world, they said.

"This is a very important contract for Harris in that it expands the opportunities for SecNet 11 sales to U.S. domestic agencies and also opens the door to foreign military sales," said Russ Haney, president, of the national programs business unit at Harris' Government Communications Systems Division.

Contact Monroe at 242-3655 or [bmonroe@flatoday.net](mailto:bmonroe@flatoday.net)

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File 348:EUROPEAN PATENTS 1978-2004/Aug W02

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File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805

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Set	Items	Description
S1	16144	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSPECIFIC) (1W)ACCESS??? ?(1W)(CONTROL??? ? OR CONTROLL??? ?)
S2	27800	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENCRYPTHER? OR ENCRYPTHER?
S3	16894	DECRYPT? OR UNENCRYPT? OR UNENCIPHER? OR UNENCYIPHER? OR DECRYPTHER? OR DECRYPTHER? OR UNCRYPT? OR UNCRYPTHER? OR UNCRYPTHER?
S4	397725	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	263394	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	83898	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK)()PAD
S7	56961	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	3105	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	16655	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (-DIGITAL OR DATA)() (ASSISTANT? ? OR ORGANIZER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	53665	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR -MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W) - (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S11	11138	RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR -APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)
S12	4649	RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?
S13	55	PERSONAL()DISPLAY?() (DEVICE? OR UNIT?? OR APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR COMPUTER? ?)
S14	436766	SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR -WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCKET OR IR OR INFRARED
S15	82666	S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANIZER? OR TERMINAL? OR APPLIANCE?)
S16	2563	(VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR -PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S17	5788	PALMSIZE? OR PALMHOLD OR HANDY? ? OR FLIPPHONE? OR VIDEOPHONE? OR PICTUREPHONE?
S18	773	S1(20N)S2:S3
S19	1720	S1(20N)S5
S20	42	S18(25N)S19
S21	1194	IC='H04K-001'
S22	6633	IC='H04L-009'
S23	15	S18(20N) (S6:S13 OR S15:S17)
S24	6	S20 AND S21:S22
S25	19	S23:S24
S26	19	IDPAT (sorted in duplicate/non-duplicate order)
S27	19	IDPAT (primary/non-duplicate records only)
S28	23	S20 NOT (S27 OR MESSAG?(1W)AUTHENTIC?(1W)CODE? ?)
S29	23	IDPAT (sorted in duplicate/non-duplicate order)
S30	23	IDPAT (primary/non-duplicate records only)

27/5,K/4 (Item 4 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01389675

Key management methods for wireless lans  
Schlüsselverwaltungsverfahren für drahtlose lokale Netze  
Procédes de gestion de cle pour reseaux locaux sans fil

PATENT ASSIGNEE:

Nokia Inc., (3175140), 6000 Connection Drive, Irving, TX 75039, (US),  
(Applicant designated States: all)

INVENTOR:

Stenman, Jorma, Myllarintanhua 6 H 27, 00920 Helsinki, (FI)

Salvela, Juha, Otakallio 1 C 28, 02150 Espoo, (FI)

Hansen, Harri, Nokitontunkuja 1 E 34, 02200 Espoo, (FI)

LEGAL REPRESENTATIVE:

Simmelvuo, Markku et al (82423), Papula Oy, Patent Agency Papula P.O. Box  
981, 00101 Helsinki, (FI)

PATENT (CC, No, Kind, Date): EP 1178644 A2 020206 (Basic)  
EP 1178644 A3 040204

APPLICATION (CC, No, Date): EP 2001660026 010206;

PRIORITY (CC, No, Date): US 502567 000211

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04L-029/06; H04L-012/22; H04L-012/28

ABSTRACT EP 1178644 A2

The security keys in the mobile terminals and access points of a wireless local area network (WLAN) are created, utilized and managed for a communication session between a mobile terminal and access point. Both the WLAN link level security protection and IP security functions of the network use the same Internet Key Exchange (IKE) key management protocol and use certificates in the same certificate hierarchy. When the mobile terminals associates with the network, it uses the IKE protocol with private keys and certificates to generate WLAN link level keys with the access point and provide mutual authentication.

ABSTRACT WORD COUNT: 98

NOTE:

Figure number on first page: 3

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020206 A2 Published application without search report  
Change: 040128 A2 International Patent Classification changed:  
20031211

Search Report: 040204 A3 Separate publication of the search report  
Change: 040324 A2 Legal representative(s) changed 20040205

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200206	377
SPEC A	(English)	200206	3543
Total word count - document A			3920
Total word count - document B			0
Total word count - documents A + B			3920

...SPECIFICATION are used to protect transmitted data and network elements. These features include data and signaling **encryption** at the **MAC** layer, authentication of the **mobile terminal** when it connects to the network, and the authentication of each data packet to assure...

27/5,K/5 (Item 5 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01316353

Switchless half-duplex transceiver front end  
Schalterlose Eingangsschaltung fur einen Halbduplexsenderempfanger  
Circuit d'entree sans commutateur pour un emetteur-recepteur semi-duplex  
PATENT ASSIGNEE:

Nokia Inc., (3175140), 6000 Connection Drive, Irving, TX 75039, (US),  
(Applicant designated States: all)

INVENTOR:

Posti, Jarkko, Kaitavedentie 1236, 34240 Kammenniemi, (FI)  
Vaananen, Paavo, Nosturinraitti 2 B 18, 33720 Tampere, (FI)  
Erva, Klaus, Opiskelijankatu 4 F 351, 33720 Tampere, (FI)

LEGAL REPRESENTATIVE:

Johansson, Folke Anders (81687), Nokia Corporation, P.O. Box 226, 00045  
Nokia Group, (FI)

PATENT (CC, No, Kind, Date): EP 1124337 A2 010816 (Basic)  
EP 1124337 A3 021120

APPLICATION (CC, No, Date): EP 2001660030 010212;

PRIORITY (CC, No, Date): US 501979 000211

DESIGNATED STATES: DE; FR; GB; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04B-001/48; H04B-007/08; H04L-012/28;  
H04B-001/707

ABSTRACT EP 1124337 A2

In a half-duplex transceiver used in mobile terminals such as cell phones, hand-held cellular terminals and laptop computers that require two antennas, switches used to select the antennas may be eliminated. Instead a bias current is used to condition a PA and LNAs associated with antennas to create the communication path. In a system with two antennas for receiving and one PA for transmitting the front end is designed so that it is possible to receive through either of the antennas or transmit through one antenna without having switches in the signal paths to direct the signal. During transmission the bias currents of the LNAs associated with antennas are turned off and the input impedance of one LNA is such that the output power of the PA is directed to an antenna. In a receiving state only one of the LNAs is used and the PA bias is turned off. A receive path for a selected antenna is chosen by turning on one of the LNAs. The PA's impedance is such that if receiving through the selected antenna the power is directed to the LNA input associated with it. The same method is applied to in LNA outputs. A BT (Bluetooth) module may be used in the system by providing access through a switch S1 to an antenna.

ABSTRACT WORD COUNT: 219

NOTE:

Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010816 A2 Published application without search report  
Search Report: 021120 A3 Separate publication of the search report  
Examination: 030716 A2 Date of request for examination: 20030520  
Examination: 030903 A2 Date of dispatch of the first examination  
report: 20030718

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200133	611
SPEC A	(English)	200133	5938

Total word count - document A 6549  
Total word count - document B 0  
Total word count - documents A + B 6549

...SPECIFICATION listen to the controlled data needed to manage the network. However, the other stations cannot **decrypt** the data portions of the packet. Power management is supported at the **MAC** level for those applications requiring mobility under battery operation. Provisions are made in the protocol for the **portable** stations to go to low power "sleep" mode during a time interval defined by the...

27/5,K/6 (Item 6 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01295378

Method for transmitting an encryption number in a communication system and a communication system

Verfahren zur Übertragung einer Verschlüsselungszahl in einem Kommunikationssystem und ein Kommunikationssystem

Procede pour transmettre un numero d'encryptage dans un systeme de communication et systeme de communication

PATENT ASSIGNEE:

Nokia Corporation, (2963881), Keilalahdentie 4, 02150 Espoo, (FI),  
(Proprietor designated states: all)

INVENTOR:

Salokannel, Juha, Toikantie 6 B 13, 36240 Kangasala, (FI)

LEGAL REPRESENTATIVE:

Pursiainen, Timo Pekka (81702), Tampereen Patenttitoimisto Oy,  
Hermiankatu 12B, 33720 Tampere, (FI)

PATENT (CC, No, Kind, Date): EP 1111952 A2 010627 (Basic)  
EP 1111952 A3 011205  
EP 1111952 B1 040303

APPLICATION (CC, No, Date): EP 2000660238 001221;

PRIORITY (CC, No, Date): FI-992769 991222

DESIGNATED STATES: DE; FR; GB; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04Q-007/38

CITED PATENTS (EP B): WO /49827 A; <US-5243653 A>; US 5546464 A

CITED REFERENCES (EP B):

YI CHENG ET AL: "Token based authentication for handover security" SECURE INFORMATION NETWORKS. COMMUNICATIONS AND MULTIMEDIA SECURITY, 20 September 1999 (1999-09-20), pages 231-243, XP002169203 Leuven, Belgium ;

ABSTRACT EP 1111952 A2

The invention relates to a method for transmitting an encryption number in a communication system (1) comprising mobile terminals (MT1(horizontal bar)MT4) and at least a first access point (AP1) and a second access point (AP2). The method comprises the steps of defining a set of encryption keys, selecting at each said access point (AP1, AP2) from said set of encryption keys one to be used at a time for encrypting information to be transmitted between said access point (AP1, AP2) and mobile terminal (MT1(horizontal bar)MT4), transmitting from the access point (AP1, AP2), at intervals, data about the encryption key selected at the time, setting up a data transmission connection between a mobile terminal (MT1(horizontal bar)MT4) and the first access point (AP1) for the transmission of information, and performing a handover, whereby a data transmission connection is set up between the second access point

(AP2) and the mobile terminal (MT1(horizontal bar)MT4). In the method, a handover is performed, wherein a data transmission connection is set up between the second access point (AP2) and the mobile terminal (MT1(horizontal bar)MT4). In the method, in connection with the handover, information is also transmitted to the mobile terminal (MT1(horizontal bar)MT4) about the encryption key selected at the second access point (AP2).

ABSTRACT WORD COUNT: 207

NOTE:

Figure number on first page: 5

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010627 A2 Published application without search report  
Search Report: 011205 A3 Separate publication of the search report  
Examination: 020717 A2 Date of request for examination: 20020510  
Examination: 020814 A2 Date of dispatch of the first examination report: 20020628  
Change: 030813 A2 Title of invention (French) changed: 20030627  
Grant: 040303 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	2001267	1139
CLAIMS B	(English)	200410	967
CLAIMS B	(German)	200410	918
CLAIMS B	(French)	200410	1089
SPEC A	(English)	200126	5741
SPEC B	(English)	200410	6091
Total word count - document A			6881
Total word count - document B			9065
Total word count - documents A + B			15946

...SPECIFICATION the lowermost layer, which takes care of using the radio channel in communication between the **mobile terminal** MT1 and the access point AP1, such as **encryption** and channel allocation in the transmission and reception of packets. This description deals primarily with data frames FR of the **MAC** layer. It is obvious that **encryption** operations can also be performed in connection with the other protocol layers, but this is...

...ST, the encryption sequence counter SC is preferably set to indicate the start of the **encryption** table ST.

In the BCCH field of certain **MAC** frames, the access point AP1 transmits information to all **mobile terminals** connected with the access point AP1 in question (broadcast frame) or to some of them...

...the mobile terminal MT1 in question. In the sleep mode, the radio part of the **mobile terminal** MT1 is set in a power saving mode or turned off. The **encryption** sequence counter SC can, however, be updated, because the **mobile terminal** MT1 is aware of the number of **MAC** frames during which it is in the sleep mode.

**Encryption** in a communication system according to a preferred embodiment of the invention is presented in...

...SPECIFICATION the lowermost layer, which takes care of using the radio channel in communication between the **mobile terminal** MT1 and the access point AP1, such as **encryption** and channel allocation in the transmission and reception of packets. This description deals primarily with data frames FR of the **MAC** layer. It is obvious that **encryption** operations can also be performed in connection with the other protocol

layers, but this is...

...ST, the encryption sequence counter SC is preferably set to indicate the start of the **encryption** table ST.

In the BCCH field of certain **MAC** frames, the access point AP1 transmits information to all **mobile terminals** connected with the access point AP1 in question (broadcast frame) or to some of them...

...the mobile terminal MT1 in question. In the sleep mode, the radio part of the **mobile terminal** MT1 is set in a power saving mode or turned off. The **encryption** sequence counter SC can, however, be updated, because the **mobile terminal** MT1 is aware of the number of **MAC** frames during which it is in the sleep mode.

**Encryption** in a communication system according to a preferred embodiment of the invention is presented in...

27/5,K/11 (Item 11 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01066458 \*\*Image available\*\*

**SECURE WIRELESS LOCAL OR METROPOLITAN AREA NETWORK AND RELATED METHODS  
RESEAU LOCAL OU METROPOLITAIN SANS FIL SECURISE ET PROCEDES S'Y RAPPORTANT**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200396614 A1 20031120 (WO 0396614)

Application: WO 2003US14324 20030507 (PCT/WO US0314324)

Priority Application: US 2002143153 20020510

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK  
SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-009/22

International Patent Class: H04L-009/00 ; G06F-017/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 4438

English Abstract

A secure wireless local or metropolitan area network (10) and data



communications devices therefore are provided (11n), where the device (11n) transmits plain text in an encrypted message including cipher text and an initialization vector. The device may include a seed generator (20) for performing a one-way algorithm using a secret key, a device address, and a changing reference value for generating a seed. Further, a random initialization vector (IV) generator (21) may be included for generating a random IV, and a key encryptor (22) may generate a key sequence based upon the seed and the random IV. Additionally, a logic circuit (23) may be included for generating cipher text based upon the key sequence and plain text, and a wireless communications device (25) may be connected to the logic circuit (23) and the random IV generator (21) for wirelessly transmitting the encrypted message.

#### French Abstract

L'invention concerne un reseau local ou metropolitain sans fil securise (10) et leurs dispositifs de communications de donnees (11n). Ces dispositifs (11n) transmettent des textes clairs dans un message crypte comprenant un cryptogramme et un vecteur d'initialisation. Le dispositif peut comprendre un generateur de graines (20) servant a mettre en oeuvre un algorithme unilateral au moyen d'une cle secrete; une adresse du dispositif; et une valeur de reference variable pour generer une graine. Un generateur (21) de vecteur d'initialisation aleatoire (IV) peut en outre etre inclus pour generer un vecteur d'initialisation aleatoire; et un crypteur de cles (22) peut produire une sequence cle basee sur la graine et le vecteur d'initialisation aleatoire. De plus, un circuit logique (23) peut etre inclus pour produire un cryptogramme base sur la sequence cle et le texte clair; et un dispositif de communications sans fil (25) peut etre connecte au circuit logique (23) et au generateur (21) de vecteur d'initialisation aleatoire pour transmettre sans fil le message crypte.

#### Legal Status (Type, Date, Text)

Publication 20031120 A1 With international search report.

Publication 20031120 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20040506 Request for preliminary examination prior to end of 19th month from priority date

Main International Patent Class: H04L-009/22

International Patent Class: H04L-009/00 ...

Fulltext Availability:

Detailed Description

#### Detailed Description

... further deterrent to many would be hackers.

The 802.11 standard is for Use with **wireless** communications devices which have associated therewith a plurality of application control layers, one of which is the **media access controller (MAC)** layer. The **MAC** layer typically has a sequence number associated therewith which is updated with each **encrypted** message that is sent. In accordance with the invention, the changing reference value may conveniently be the **MAC** layer sequence number, although other changing reference values may be generated or used for creating...

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01047036      \*\*Image available\*\*

**TEST SYSTEM FOR SIMULATING A WIRELESS ENVIRONMENT AND METHOD OF USING SAME  
SYSTEME D'ESSAI PERMETTANT DE SIMULER UN ENVIRONNEMENT SANS FIL ET PROCEDE  
D'UTILISATION DE CE SYSTEME**

Patent Applicant/Assignee:

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Legal Representative:

LOWRY David D (et al) (agent), Brown Rudnick Berlack Israels LLP, One  
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200377060 A2-A3 20030918 (WO 0377060)

Application: WO 2003US6398 20030304 (PCT/WO US0306398)

Priority Application: US 2002361572 20020304

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04Q-007/20

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 15925

**English Abstract**

A method and system for simulating a wireless environment is provided including a central RF combining component (110); a plurality of connection nodes (102), each connection node (102) in RF connection with the central RF combining component (110) through a programmable attenuation component (108); wherein the programmable attenuation components (108) are controlled by a controller console, the controller console maintaining information regarding simulated spatial positioning of the plurality of connection nodes (102) in the simulated wireless environment, and adjusting the programmable attenuation components (108) to appropriately simulate the simulated spatial positioning of the connection nodes (102) in the simulated wireless environment. Additionally, an RF module (448) for creating and receiving RF signals in a test environment is provided.

**French Abstract**

L'invention concerne un procede et un systeme de simulation d'un environnement sans fil, comprenant une composante de combinaison RF centrale, plusieurs noeuds de connexion, chaque de noeud de connexion etant en connexion RF avec la composante de combinaison RF centrale a travers une composante d'attenuation pouvant etre programme. Les

composantes d'attenuation pouvant etre programmees sont commandeées par une console d'unité de commande, cette console d'unité de commande maintenant des informations concernant le positionnement spatial simule des noeuds de connexion dans l'environnement sans fil simule, et réglant les composantes d'attenuation pouvant etre programmees afin de simuler de facon appropriée le positionnement spatial simule des noeuds de connexion dans l'environnement sans fil simule. L'invention concerne également un module RF destine a creer et recevoir des signaux RF dans un environnement d'essai.

Legal Status (Type, Date, Text)

Publication 20030918 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20031127 Late publication of international search report

Republication 20031127 A3 With international search report.

Examination 20031218 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:  
Detailed Description

Detailed Description

... address, and implements the remaining functionality necessary to completely simulate a single IEEE 802.11 **wireless client** 104. This functionality may include, but is not limited to **encryption** and **decryption**, fragmentation and defragmentation and functionality of interest normally associated with the IEEE 802.11 **MAC** sublayer Management Entities, such as Power Management, Timing and Synchronization Function, Authentication and Association management...

27/5,K/17 (Item 17 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00901746 \*\*Image available\*\*

**POSITIONING A SUBSCRIBER TERMINAL IN A PACKET-SWITCHED MOBILE TELEPHONY NETWORK USING BOTH PACKET-SWITCHED AND CIRCUIT-SWITCHED MESSAGES**

**LOCALISATION D'UN TERMINAL D'ABONNE DANS UN RESEAU DE TELEPHONIE MOBILE A COMMUTATION DE PAQUETS UTILISANT DES MESSAGES A LA FOIS A COMMUTATION DE PAQUETS ET A COMMUTATION DE CIRCUITS**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200235877 A1 20020502 (WO 0235877)

Application: WO 2001FI909 20011018 (PCT/WO FI0100909)

Priority Application: FI 20002337 20001024

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY BZ CA CH CN CO CR

CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM  
DZ EC EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU  
ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NO NZ PH PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT  
TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04Q-007/38

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8076

#### English Abstract

The object of the invention is a method, network element, and system for positioning a subscriber terminal in a packet-switched mobile telephone network, the said network comprising a core network element (SGSN, 504), base stations, a Base Station Controller (501) controlling these, and a mobile terminal; the connections in the mobile telephone network are arranged in a packet-switched fashion. The system comprises a location unit (SMLC, 505) for determining the position of the terminal, functionally connected with the Base Station Controller (501) of the mobile telephone network; the connection between the Base Station Controller (501) and the location unit (SMLC) is circuit-switched. The base station controller (501) comprises both circuit-switched (BSC) and packet-switched (PCU) functionality for processing circuit-switched, and respectively, packet-switched messages, as well as means (506, 507) for establishing an association between the circuit-switched and the packet-switched functionality for the transmission of data related to a specific positioning between the packet-switched and the circuit-switched functionality.

#### French Abstract

L'invention concerne un procede, un element de reseau et un systeme permettant de localiser un terminal d'abonne dans un reseau telephonique mobile a commutation de paquets, ledit reseau comportant un element de reseau central (noeud de support GPRS de service (SGSN), 504), des stations de base, un controleur de station de base (501) commandant lesdites stations, et un terminal mobile ; les connexions du reseau telephonique mobile sont disposees pour la commutation de paquets. Le systeme comporte une unite de localisation (centre serveur de localisation (SMLC), 505) afin de localiser un terminal, laquelle unite est fonctionnellement connectee au controleur de station de base (501) du reseau telephonique mobile ; La connexion entre le controleur de station de base (501) et l'unite de localisation (SMLC) est a commutation de circuits. Le controleur de station de base (501) comprend une fonctionnalite a la fois de commutation de circuits (controleur de station de base) et de commutation de paquets (unite de commande de paquets) pour traiter des messages respectivement a commutation de circuits et a commutation de paquets, ainsi que des supports (506, 507) destines a associer les fonctionnalites de commutation de circuits et de commutation de paquets afin de transmettre des donnees relatives a une localisation specifique entre la fonctionnalite de commutation de paquet et la fonctionnalite de commutation de circuits.

Legal Status (Type, Date, Text)

Publication 20020502 A1 With international search report.

Examination 20020808 Request for preliminary examination prior to end of  
19th month from priority date

Fulltext Availability:  
Detailed Description

Detailed Description

... to minimise the effect of a modified air interface on the network component of the **mobile telephone** network. The information to be transmitted, as well as the user data, will be protected by **encryption**. Between the Utn and Gb interfaces, the LLC data will be transmitted in the LLC relaying layer LLC RELAY.

The **MAC** (Medium Access Control) layer is responsible for the following tasks.

multiplexing of data and signalling...

?

30/5,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01763349

Method for fast roaming in a wireless network

Vefahren zum schnellen Umherstreifen in einem drahtlosen Netzwerk

Methode d'itinerance rapide dans un reseau sans fil

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 1439667 A2 040721 (Basic)

APPLICATION (CC, No, Date): EP 2004000636 040114;

PRIORITY (CC, No, Date): US 439891 P 030114

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: H04L-012/28; H04L-012/56

ABSTRACT EP 1439667 A2

A roaming service method for a fast and secure wireless network is provided. In an embodiment of the present invention, an AP, which an STA associates with, transmits security keys needed for roaming to neighbor APs of the AP. When the STA moves to one of the neighbor APs, a reassociation is carried out between the STA and the neighbor AP using the already provided security key. In another embodiment of the present invention, an authentication server transmits security keys needed for roaming to neighbor APs to which the STA is likely to move, so that when the STA moves to one of the neighbor APs, a reassociation is carried out between the STA and the neighbor AP using the already provided security key.

ABSTRACT WORD COUNT: 125

NOTE:

Figure number on first page: 8B

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 040721 A2 Published application without search report

Examination: 040721 A2 Date of request for examination: 20040114

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200430	1078
SPEC A	(English)	200430	8282
Total word count - document A			9360
Total word count - document B			0
Total word count - documents A + B			9360

...SPECIFICATION standard regulates that data is encrypted by a WEP (Wired Equivalent Privacy) algorithm and the **encryption** key is shared preliminarily and used as fixed. For details, see "ISO/IEC, " **Wireless LAN Medium Access Control (MAC)** and Physical layer (PHY) specifications," ISO/IEC 8802-11, ANSI/IEEE Std 802.11, 1999".

To correct **wireless** security flaws of the IEEE 802.11-based WLAN systems, IEEE 802.11i specifies IEEE...

30/5,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01753546

**Method and device for prefetching frames**

**Verfahren und Vorrichtung zur Rahmenvorausholung**

**Procede et dispositif de pre-extraction des trames**

PATENT ASSIGNEE:

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LEGAL REPRESENTATIVE:

Frost, Alex John (85791), Boulton Wade Tennant, Verulam Gardens 70 Gray's Inn Road, London WC1X 8BT, (GB)

PATENT (CC, No, Kind, Date): EP 1434391 A2 040630 (Basic)

APPLICATION (CC, No, Date): EP 2003258218 031223;

PRIORITY (CC, No, Date): GB 230031 021223

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: H04L-012/28

ABSTRACT EP 1434391 A2

A method of communicating between a transmitter and a receiver in a WLAN is disclosed. The transmitter has a Medium Access Control (MAC) layer. Data to be sent from the transmitter to the receiver is placed in a first data queue during a first period of time, and in a second data queue during a second period of time. Whilst the second queue is being filled from the MAC layer during the second time period, the data stored in the first queue is being filled from the MAC layer during the first time period, the data in the second queue is transmitted to the receiver. Thus there is provided an efficient co-ordination and transmission of data frames from wireless devices, and a high performance flow of traffic between clients and APs.

ABSTRACT WORD COUNT: 132

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 040630 A2 Published application without search report  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200427	694
SPEC A	(English)	200427	3228
Total word count - document A			3922
Total word count - document B			0
Total word count - documents A + B			3922

...SPECIFICATION MAC layer controls the co-ordination of frames having time-critical functions, while the upper MAC handles frames having non-critical time constraints. The upper MAC typically co-ordinates management frames including authentication, association and encryption and de-encryption frames. The lower MAC controls functionalities including frame transmission queues, where frames can be buffered before transmission until the wireless medium is free, and beacon frames.

In the present embodiment of the invention, if data...

30/5,K/3 (Item 3 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01740593

Adaptive adjustment of backoff times in wireless network communications  
Adaptive Anpassung von Backoff-Zeiten des Kommunikationen im drahtlosen Netzwerk

Reglage adaptatif des temps de backoff pour des communications dans un reseau sans fil

PATENT ASSIGNEE:

TEXAS INSTRUMENTS INCORPORATED, (279070), 13500 North Central Expressway, Dallas Texas 75265, (US), (Applicant designated States: all)

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Shoemake, Matthew B., 701 Laredo Circle, 75013, Allen, (US)

Ho, Jin-Meng, 7700 Cherry Creek Drive, 75025, Plano, (US)

LEGAL REPRESENTATIVE:

Holt, Michael et al (50425), Texas Instruments Ltd., PO Box 5069, Northampton, Northamptonshire NN4 7ZE, (GB)

PATENT (CC, No, Kind, Date): EP 1424814 A1 040602 (Basic)

APPLICATION (CC, No, Date): EP 2003104397 031126;

PRIORITY (CC, No, Date): US 304973 021126

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: H04L-012/28; H04L-012/56; H04Q-007/38

ABSTRACT EP 1424814 A1.

A wireless network, including a plurality of network elements such as a wireless access point (9), and computer stations (2, 4, 6), is disclosed. The wireless network operates so that each network element (2, 4, 6, 9) waits for a pseudo-randomly selected duration, after the end of a frame on the channel, before initiating transmission. One of the network elements, such as the wireless access point (9), measures the performance of the network over a measurement period (T), and adjusts a minimum value of the upper limit of the range from which the random duration is selected, according to the performance of the network over the measurement period. The times measured may be the successful transmission time (Ts)), which is maximized in adjusting the minimum value, or the idle and collision times (Ti), Tc)), which are equated in the optimization of the minimum value.

ABSTRACT WORD COUNT: 145

NOTE:

Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 040602 A1 Published application with search report

LANGUAGE (Publication,Procedural,Application): English; English; English



FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200423	1610
SPEC A	(English)	200423	8957
Total word count - document A			10567
Total word count - document B			0
Total word count - documents A + B			10567

...SPECIFICATION spectrum processor 40 according to the preferred embodiments of the invention. The functionality performed by MAC 38 and baseband processor 42 corresponds to that in conventional wireless network adapters, for example as implemented in the TNETW1100 single-chip WLAN medium access controller (MAC) noted above. In summary, MAC 38 generates the appropriate packets for wireless communication, such packets including the acknowledge (ACK), RTS, CTS, probe response, and beacon packets; MAC 38 also provides encryption and decryption functionality, and can be used to implement wired equivalent privacy (WEP). Baseband processor 42 performs...

30/5,K/8 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01135003 \*\*Image available\*\*

PROTECTING REAL-TIME DATA IN WIRELESS NETWORKS

PROTECTION DE DONNEES EN TEMPS REEL DANS DES RESEAUX HERTZIENS

Patent Applicant/Assignee:

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SJORPAES David, c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven, NL, IT (Residence), IT (Nationality), (Designated only for: US)

Legal Representative:

GROENENDAAL Antonius W M (agent), Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200457817 A2 20040708 (WO 0457817)

Application: WO 2003IB5345 20031120 (PCT/WO IB03005345)

Priority Application: EP 200280374 20021219

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-012/64

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 4456

#### English Abstract

The invention provides a traffic shaper module allocates more bandwidth to real-time data in wireless TCP/IP networks where accessible bandwidth is limited. This is particular relevant for IEEE 802.11b networks. For downstream data, the traffic shaper module can be set to control the transmission to all clients and thereby give priority to the port carrying real-time data. For the upstream case, data transmission from all kinds of standard devices is to be reduced or delayed. Hence, the data transmissions from other clients have to be controlled remotely from the access point. By delaying or discarding packets, such as TCP acknowledgements, to other clients, the traffic shaper module artificially increases their Round Trip Time (RTT). The protocol at these clients responds to the increased RTT by transmitting data at a lower rate, thereby leaving more bandwidth for the real-time data port.

#### French Abstract

L'invention concerne un module mise en forme de trafic attribuant plus de largeur de bande aux donnees en temps reel dans les reseaux hertziens TCP/IP ou la largeur de bande accessible est limitee. Les reseaux IEEE 802.11b sont particulierement concernees. Pour des donnees descendantes, le module mise en forme de trafic peut etre regle pour commander l'emission vers tous les clients et pour accorder de ce fait la priorite au port portant des donnees en temps reel. Pour le cas de donnees montantes, l'emission de donnees de toutes sortes de dispositifs standard doit etre reduite ou retardee. Par consequent, les emissions de donnees d'autres clients doivent etre commande'es eloignees du point d'acces. En retardant ou en jetant des paquets, tels que des accuses de reception TCP, concernant d'autres clients, le module de mise en forme de trafic augmente artificiellement leur temps de transmission aller-retour (RTT). Le protocole concernant ces clients repond au RTT accru par emission des donnees a un debit inferieur, laissant de ce fait plus de largeur de bande pour le port de donnees en temps reel.

Legal Status (Type, Date, Text)

Publication 20040708 A2 Without international search report and to be republished upon receipt of that report.

Fulltext Availability:

Detailed Description

Detailed Description

... on the size of the upstream EP packets. Upstream packet sizes are known at the **MAC** layer and are made available by the **wireless** network driver.

If the traffic is **encrypted** the sorting operation can be more complicated. If the Secure Socket Layer (SSL) mechanism is...

30/5,K/9 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01076526 \*\*Image available\*\*

**SYNCHRONIZATION OF A COUNTER VALUE EMPLOYED AS A PARAMETER FOR CIPHERING AND DECIPHERING IN A MOBILE COMMUNICATION SYSTEM**

**SYNCHRONISATION D'UNE VALEUR DE COMPTEUR EMPLOYEE COMME PARAMETRE POUR LE CHIFFREMENT ET DECHIFFREMENT DANS UN SYSTEME DE COMMUNICATION MOBILE**

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Patent and Priority Information (Country, Number, Date):  
Patent: WO 2003107706 A1 20031224 (WO 03107706)  
Application: WO 2002IB2156 20020612 (PCT/WO IB0202156)  
Priority Application: WO 2002IB2156 20020612  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Main International Patent Class: H04Q-007/38  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 6551

#### English Abstract

A method is presented for synchronizing the counters in a mobile station MS and in a network element BSS of a mobile communication network, wherein the respective value of the counters is employed as a parameter for ciphering/deciphering data transmitted between the mobile station MS and the network element BSS. In order to enable such a synchronization, it is proposed that the method comprises transmitting the least significant bit HFN LSB of the current counter value in the mobile station MS or in the network element BSS to the respective other entity during an establishment of a temporary data connection between the two entities. Further, it is proposed that the method comprises synchronizing the counter at the respective other entity based at least on the transmitted least significant bit. A corresponding mobile station MS and a corresponding network element BSS are also presented .

#### French Abstract

La presente invention concerne un procede permettant de synchroniser les compteurs dans une station mobile (MS) et un element de reseau (BSS) d'un reseau de communication mobile dans lequel les valeurs respectives des differents compteurs sont employees comme parametre pour les donnees de chiffrement/dechiffrement echangees entre la station mobile (MS) et l'element de reseau (BSS). Pour permettre une telle synchronisation, il est propose de prendre le bit de poids le plus faible (HFN LSB) de la valeur courante du compteur de la station mobile (MS) ou de l'element de reseau (BSS) et de le transmettre a l'autre entite correspondante pendant l'etablissement d'une connexion numerique temporaire entre les deux entites. Il est propose egalement, pour synchroniser le compteur de l'autre entite correspondante, de se baser sur au moins le bit de poids le plus faible transmis. L'invention concerne egalement une station

mobile (MS) et un element de reseau (BSS) selon l'invention.

Legal Status (Type, Date, Text)

Publication 20031224 A1 With international search report.

Examination 20040325 Request for preliminary examination prior to end of  
19th month from priority date

Fulltext Availability:

Detailed Description

Detailed Description

... synchronization of the HFN

counters, the subsequent uplink RLC data blocks can be  
ciphered and **deciphered** correctly.

When a **mobile** station is in the **MAC** -Idle state, a packet  
access can be achieved either in one phase or in two...

**30/5,K/10** (Item 10 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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01064293 \*\*Image available\*\*

**PARTITIONED MEDIUM ACCESS CONTROL**

**COMMANDE D'ACCES AU SUPPORT CLOISONNEE**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200394452 A2-A3 20031113 (WO 0394452)

Application: WO 2003US13766 20030502 (PCT/WO US2003013766)

Priority Application: US 2002377679 20020503; US 2003421265 20030423

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG

SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-012/56

International Patent Class: H04L-012/28

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 3953

English Abstract

A novel Medium Access Control (MAC) architecture for IEEE 802.11 wireless local area networks is disclosed. The illustrative embodiment partitions the medium access control into an Upper Medium Access Control for providing medium-access-control services that are independent of a Physical Control, and a Lower Medium Access Control for providing medium-access-control services that are dependent on the Physical Control. By partitioning the Medium Access Control in this manner, a single Upper Medium Access Control can be employed for any existing or future Physical Control while maintaining full compatibility with the huge installed base of existing IEEE 802.11 equipment. It will be clear to those skilled in the art how to make and use alternative embodiments of the present invention for networks that employ protocols other than IEEE 802.11.

#### French Abstract

L'invention concerne une architecture de commande d'accès au support cloisonnée pour réseaux de zone locale sans fil IEEE 802.11. Le mode de réalisation illustrateur sépare la commande d'accès au support en une commande d'accès au support supérieure permettant de fournir des services de commande d'accès au support qui sont indépendants d'une commande physique, et en une commande d'accès au support inférieure permettant de fournir des services de commande d'accès au support qui sont dépendants de la commande physique. Un tel cloisonnement de la commande d'accès au support permet l'utilisation d'une seule commande d'accès au support supérieure pour toute commande physique existante ou future, tandis qu'est maintenue une compatibilité complète avec l'importante base installée de l'équipement existant IEEE 802.11. Ceci paraîtra évident aux experts aptes à réaliser et à utiliser des autres modes de réalisation de cette invention pour les réseaux qui utilisent des protocoles autres que IEEE 802.11.

#### Legal Status (Type, Date, Text)

Publication 20031113 A2 Without international search report and to be republished upon receipt of that report.  
Search Rpt 20040108 Late publication of international search report  
Republication 20040108 A3 With international search report.  
Examination 20040205 Request for preliminary examination prior to end of 19th month from priority date

#### Fulltext Availability: Detailed Description

Detailed Description  
... well-known in the art.

[0021] Figure 3 depicts a conceptual architectural diagram of a **wireless** station in accordance with the illustrative embodiment of the present invention. As shown in Figure 3, **Medium Access Control 220** is partitioned into Upper Medium Access Control 310 and Lower Medium Access Control 320. Upper **Medium Access Control 310** provides a subset of **medium - access - control** services that are independent of Physical Control 230, including transmit queueing, **encryption**, **decryption**, authentication, association, reassociation, scanning, distribution, and traffic categorization (for the purposes of, for example but...

30/5,K/11 (Item 11 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01037446 \*\*Image available\*\*

**MEDIUM ACCESS CONTROL IN A WIRELESS NETWORK**

**COMMANDE D'ACCES AU SUPPORT DANS UN RESEAU SANS FIL**

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200367453 A1 20030814 (WO 0367453)

Application: WO 2003US3991 20030207 (PCT/WO US0303991)

Priority Application: US 2002355204 20020208

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI  
SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-015/16

International Patent Class: H04J-003/02; H04L-012/403

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9393

**English Abstract**

A MAC architecture (Fig 2, 24) for WLAN (Fig1, 14) stations (Fig 1, 16) partitions functionality between a software-based MAC component (Fig3, 24A) and a hardware-based MAC component (Fig3, 24B) that work together to balance function and performance (Fig 8). In general, the fulcrum for this balance centers on timing requirements (Fig 12). Accordingly, the hardware-based MAC component is designed to handle many of the functions that are processor-intensive and/or must be performed under strict timing constraints (Fig 6). The software-based MAC component is designed to handle many of the functions that are memory-intensive, but present more lenient timing requirements (Fig 7). The software-based MAC component may be configured to provide an efficient and robust interface to the hardware-based MAC component (Fig 5, 25). In particular, the software-based MAC component may format and prioritize packets to be sent over the air interface (Fig 9), and generate a command structure that provides instructions for the hardware-based MAC component to process the packet (Fig 10).

**French Abstract**

L'invention concerne une architecture de commande d'accès au support (MAC) (fig. 2, 24) destinée aux stations d'un réseau local sans fil (WLAN) (fig. 1, 14). Dans cette architecture, la fonctionnalité est divisée entre un composant MAC logiciel (fig. 3, 24A) et un composant MAC matériel (fig. 3, 24B) qui coopèrent de manière à équilibrer fonction et performance (Fig. 8). En général le paramètre déterminant pour cet

equilibre est centre sur les contraintes de synchronisation (Fig. 12). Le composant MAC materiel est par consequent concu pour gerer un grand nombre des fonctions qui sont gourmandes en temps de processeur et/ou doivent etres executees en respectant des contraintes de synchronisation strictes (Fig. 6). Le composant MAC logiciel est configure pour gerer un grand nombre des fonctions qui sont voraces en memoire, mais presentent des contraintes de synchronisation moins rigides (Fig. 6). Le composant MAC logiciel peut configure de maniere a fournir une interface efficace et robuste avec le composant MAC materiel (Fig. 5, 25). Il peut en particulier formater et classer par ordre de priorite les paquets devant etre envoyes par l'interface radio (Fig. 9), et generer une structure de commande qui genere des instructions concernant le traitement des paquets, destinees au composant MAC materiel (Fig. 10).

Legal Status (Type, Date, Text)

Publication 20030814 A1 With international search report.

Publication 20030814 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20031127 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:

Detailed Description

Detailed Description

... of the functions that are traditionally performed at higher layers of communication stacks in the **MAC** layer. For example, the IEEE 802.11 standards require that the **MAC** layer be responsible for scanning, authentication, association, **encryption**, fragmentation, and power management. Hence, a **MAC** layer designed for **wireless** networking may require delivery of high-level functionality in combination with low-level responsiveness. Such...

**30/5,K/12 (Item 12 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

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01009026 \*\*Image available\*\*

**WIRELESS LANS AND NEIGHBORHOOD CAPTURE**

**RESEAUX LOCAUX SANS FIL ET CAPTURE DE VOISINAGE**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200339054 A2-A3 20030508 (WO 0339054)

Application: WO 2002US36425 20021028 (PCT/WO US02036425)

Priority Application: US 2001330930 20011102; US 2001985257 20011102; US  
2001331030 20011107; US 2001331211 20011113; US 2001342343 20011221; US  
2002187132 20020628; US 2002256299 20020927; US 2002256309 20020927; US  
2002256305 20020927; US 2002256516 20020927; US 2002256471 20020927; US  
2002256384 20020927

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04Q-007/24

International Patent Class: H04L-012/413; H04J-003/06

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 10416

#### English Abstract

Overlapped wireless LAN cells in a medium have an equal chance at establishing a session on the medium. A first member station in the first cell transmits a timing packet containing a timestamp value, which is received at a second member station in the second cell. This synchronizes member stations in the first and second cells to interrupt transmissions at a global channel release instant corresponding to the timestamp value. The member stations in the first and second cells then have the opportunity to contend for access to the medium following the global channel release instant, using a slotted CSMA/CA access method. Each of the member station in the first and second cells has a superframe clock that is synchronized based on the timestamp value, thereby establishing a periodic global channel release instant during each of a plurality of periodic superframes. The member stations can then periodically interrupt transmissions at the periodic global channel release instant to contend for the medium. The periodic global channel release instant occurs at intervals that are sufficiently close to meet delay and jitter restrictions for time-critical voice and video applications.

#### French Abstract

L'invention concerne des cellules de reseaux locaux, LAN, sans fil se chevauchant dans un support, qui ont une chance egale d'etablir une session sur le support. Une premiere station membre dans la premiere cellule emit un paquet de synchronisation contenant une valeur d'horodateur, qui est recu par une seconde station membre dans la seconde cellule. Les stations membres sont ainsi synchronisees dans les premiere et seconde cellules pour interrompre des emissions a un instant de liberation de canal global correspondant a la valeur d'horodateur. Les stations membres dans les premiere et seconde cellules ont alors la possibilite de se disputer l'acces au support a la suite de l'instant de liberation de canal global par un procede d'acces CSMA/CA a fentes. Chacune des stations membres dans la premiere et dans la seconde stations membres a une horloge a supertrame synchronisee sur la base de la valeur d'horodateur. Un instant de liberation de canal global periodique peut ainsi etre etabli pendant chacune des nombreuses supertrames periodiques. Les stations membres peuvent donc interrompre periodiquement des emissions a l'instant de liberation de canal global periodique pour rivaliser pour le support. Ledit instant survient a des intervalles qui sont suffisamment rapproches pour repondre aux restrictions en matiere de retard et de guigue pour des applications vocales et video a duree critique.

Legal Status (Type, Date, Text)

Publication 20030508 A2 Without international search report and to be republished upon receipt of that report.



Examination 20030731 Request for preliminary examination prior to end of  
19th month from priority date  
Search Rpt 20040226 Late publication of international search report  
Republication 20040226 A3 With international search report.

Fulltext Availability:  
Detailed Description

Detailed Description

... using the

25 Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)  
access method. The **MAC** provides link setup, data fragmentation,  
authentication, **encryption**, and power management.

Synchronization is the process of the stations in an  
IEEE 802.11 **wireless** LAN cell getting in step with each other, so that  
reliable communication is possible. The **MAC** provides the  
synchronization mechanism to allow support of physical layers that  
make use of frequency...

30/5,K/14 (Item 14 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00989375 \*\*Image available\*\*

**WIRELESS DEVICE ATTACHMENT AND DETACHMENT SYSTEM, APPARATUS AND METHOD  
SYSTEME, APPAREIL ET PROCEDE DE RACCORDEMENT ET DE FIN DE RACCORDEMENT DE  
DISPOSITIF SANS FIL**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200319396 A1 20030306 (WO 0319396)

Application: WO 2002US26914 20020822 (PCT/WO US0226914)

Priority Application: US 2001314524 20010822; US 2002214949 20020807; US  
2002216671 20020809

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-013/38

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6809

#### English Abstract

A polling method, apparatus, and system capable to detect the attachment and detachment of Universal Serial Bus (USB) devices in a wireless USB system. A USB hub provides a wired connection to the host, while providing wireless attachment points for its devices. The USB host periodically queries the hub looking for changes in the hub's status register. During each period, the hub sends a polling message through each of its wireless ports, and awaits a response. A peripheral device that wishes to attach to the system responds to the message by sending its unique peripheral address. If a device currently occupies the port, the hub sends out the device's unique assigned address as part of the polling message. If the device is still present, it responds by sending its unique peripheral address. If the host does not receive a response after multiple retries, the device is considered detached. The hub thus determines the status of the ports and updates the appropriate bits in the status register, which is the queried by the host.

#### French Abstract

La presente invention concerne un procede, un appareil et un systeme de regroupement capables de detecter le raccordement et la fin de raccordement de dispositifs bus serie universel (USB) dans un systeme USB sans fil. Un central USB fournit une connexion filaire a l'hote et des points de raccordement pour ses dispositifs. L'hote USB questionne periodiquement le central recherchant des modifications dans le registre d'etats du central. Pendant chaque periode, le central envoie un message de regroupement via chacun de ses ports, et attend une reponse. Un dispositif peripherique qui souhaite se raccorder au systeme repond a ce message en envoyant son adresse de peripherique unique. Si un dispositif occupe actuellement le port, le central envoie l'adresse attribuee unique de ce dispositif sous forme de partie du message de regroupement. Si le dispositif est toujours present, il repond en envoyant son adresse peripherique unique. Si l'hote ne recoit pas de reponse apres de multiples nouvelles tentatives, le dispositif est considere comme non raccorde. Le central determine ainsi l'etat des ports et met a jour les bits appropries dans le registre d'etats, lequel est ensuite demande par l'hote.

#### Legal Status (Type, Date, Text)

Publication 20030306 A1 With international search report.

Publication 20030306 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

#### Fulltext Availability:

Detailed Description

#### Detailed Description

... is any structure that provides the procedures involved in transferring a single bit over the **wireless** medium being used by the **wireless** module I IO.

FIG. 3 is a block diagram of a **media access control** layer 104, constructed and operative in accordance with an embodiment of the present invention. In this

5

embodiment, **media access control** layer 104 comprises a protocol management interface 300 and a key management and **encryption** unit (KMEU) 310.

Protocol management interface 300 is the structure that enables **media access control** layer 104 to communicate using a particular **wireless** communications protocol, as described above. For example, in a **wireless** Universal Serial Bus (wireless USB) embodiment, protocol management interface 300 processes messages from device interface...

30/5,K/15 (Item 15 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00984799 \*\*Image available\*\*

**EFFICIENT SECURITY ASSOCIATION ESTABLISHMENT NEGOTIATION TECHNIQUE**  
**TECHNIQUE DE NEGOCIATION D'ETABLISSEMENT D'UNE ASSOCIATION DE SECURITE EFFICACE**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200314935 A1 20030220 (WO 0314935)

Application: WO 2002IB3135 20020808 (PCT/WO IB0203135)

Priority Application: US 2001923966 20010808

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-011/30

International Patent Class: G06F-015/16; G06F-015/173; H04H-001/00;  
H04B-007/24

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 3997

English Abstract

A mobile terminal (200) is connected via a wireless interface to an agent (210) of a visited network (220) which is connected to a visited gateway (230) connected to a home gateway (240). A subscriber

database/authentication center (260) is disposed within the home network (250). It is assumed that there is a pre-established security association between the visited GW (230), which can be the visited AAA server, and the agent (210). This Security Association may, for example, be set up offline through manual key entry, Internet Key Exchange Protocol or Key Distribution Server specific to the Visited Network (220). This provides security internally to the network so that the operator can choose the level and type of security to be implemented in its network. There is another pre-selected Security Association between Subscriber database/Authentication Center (260) and the Home GW (240). This security Association may be established in the same fashion as that noted above and also serves to provide security internally to the network. There is still another pre-established Security association between the Home GW (240) and the Visited GW (230).

#### French Abstract

Selon l'invention, une technique de negociation d'etablissement d'une association de securite consiste a transmettre a un premier element de reseau des informations d'identification d'un noeud mobile, par l'intermediaire d'une premiere interface. Des negociations sont alors entamees entre le premier element de reseau et un second element de reseau servant de mandataire pour le noeud mobile, par l'intermediaire d'une seconde interface. Ces negociations permettent d'etablir une association de securite entre un noeud mobile et un premier element de reseau, le second element de reseau utilisant anterieurement les parametres de l'association de securite stockes du noeud mobile. Suite a un accord entre le premier element de reseau et le second element de reseau par rapport aux parametres de l'association de securite, le premier element de reseau transmet les parametres de l'association de securite convenus, au noeud mobile, par l'intermediaire de la premiere interface. Le premier element de reseau peut comprendre un agent d'origine, un noeud correspondant ou un agent, et la premiere interface peut inclure une interface sans fil permettant d'envoyer des informations entre le noeud mobile et le premier element de reseau. Le premier element de reseau peut comprendre egalement une premiere passerelle connectee audit element. La premiere passerelle peut comprendre egalement un serveur AAA (authentification, autorisation, et comptabilite). Le second element de reseau peut comprendre une seconde passerelle et un centre d'authentification/base de donnees d'un abonne, et la seconde passerelle peut etre connectee au centre d'authentification/base de donnee d'un abonne. La seconde passerelle peut comprendre egalement un serveur AAA.

#### Legal Status (Type, Date, Text)

Publication 20030220 A1 With international search report.

Publication 20030220 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Correction 20030501 Corrected version of Pamphlet front pages: revised abstract received by the International Bureau after completion of the technical preparations for international publication

Republication 20030501 A1 With international search report.

Examination 20030626 Request for preliminary examination prior to end of 19th month from priority date

#### Fulltext Availability: Detailed Description

#### Detailed Description

... ciphering key CK. That is, F1 (Kil  
RAND1) = K and F2 (Ki, RAND2) = CK. The **Mobile** Node 200 sends its

identity through its NAI, for example, to the Agent 210 with the RAND1 and a

MAC for integrity protection using the IK. The Mobile Node 200 may also

9

protect part of the message using CK encrypt it.

Since the message is a request for a Security Association to be set up...

30/5,K/16 (Item 16 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00973591 \*\*Image available\*\*

#### AD HOC NETWORK DISCOVERY MENU

#### MENU DE DECOUVERTE DE RESEAU AD HOC

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200303610 A1 20030109 (WO 0303610)

Application: WO 2002IB2325 20020621 (PCT/WO IB0202325)

Priority Application: US 2001891382 20010627

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04B-007/00

International Patent Class: H04Q-007/24; H04Q-007/20

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 32605

#### English Abstract

When a new wireless device (100) arrives within the communication range of any member (106 or 108) of the ad hoc network, its inquiry signals are answered by the first member detecting the inquiry. If that first member is an ad hoc network information provider (106), it responds with information accessed from its service registry characterizing the ad hoc network. If, instead, an ordinary device (108) in the ad hoc network is the first to respond to the inquiry signals of the arriving device, the

device responds with the address of the ad hoc network information provider (106). The arriving device (100) then pages the ad hoc network information provider (106) to obtain information characterizing the ad hoc network.

#### French Abstract

Lorsqu'un dispositif sans fil (100) arrive dans la plage de communication d'un element quelconque (106, 108) d'un reseau ad hoc, le premier element detectant une demande repond aux signaux de demande provenant dudit dispositif. Lorsque ce premier element est un fournisseur d'informations (106) du reseau ad hoc, il repond a l'aide d'informations auxquelles on accede a partir d'un registre de services caracterisant ledit reseau ad hoc. Au contraire, lorsqu'un dispositif ordinaire (108) du reseau ad hoc est le premier a repondre aux signaux de demande du dispositif arrivant, ledit dispositif repond a l'aide de l'adresse du fournisseur d'informations (106) du reseau ad hoc. Puis, le dispositif arrivant (100) recherche ledit fournisseur d'informations (106) du reseau ad hoc afin d'obtenir des informations caracterisant ledit reseau ad hoc.

#### Legal Status (Type, Date, Text)

Publication 20030109 A1 With international search report.

Publication 20030109 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

#### Fulltext Availability:

Detailed Description

#### Detailed Description

... also provides service inquiring which is similar to the Bluetooth inquiry and scan operation. The **MAC** , provides link setup, data fragmentation, authentication, **encryption** , power management.

The IEEE 802.11 **wireless** LAN architecture is built around a basic service set (BSS) of stations that communicate with...

30/5,K/17 (Item 17 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00778215 \*\*Image available\*\*

#### MODEM FOR WIRELESS LOCAL AREA NETWORK

#### MODEM POUR RESEAU LOCAL SANS FIL

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New York Avenue, N.W., Washington, DC 20005-3934, US  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200111767 A1 20010215 (WO 0111767)  
Application: WO 2000US21359 20000804 (PCT/WO US0021359)  
Priority Application: US 99147129 19990804; US 2000525615 20000314; US  
2000526041 20000314  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Main International Patent Class: H03C-003/40  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 33481

#### English Abstract

A transmitter (7102) includes a balanced modulator/up-converter (7104), a control signal generator (7142), an optional filter (7106) and an optional amplifier (7108). Transmitter (7102) up-converts a baseband signal (7110) to produce an output signal (7140) that is conditioned for wireless or wire line transmission. In doing so, the balanced modulator (7104) receives the baseband signal (7110) and samples the baseband signal in a differential and balanced fashion according to the first and second control signals that are phase shifted with respect to each other and so generated a harmonically rich signal (7138). The resulting harmonically rich signal (7138) includes multiple harmonic images that repeat at harmonics of the sampling frequency information to reconstruct the baseband signal.

#### French Abstract

Un émetteur (7102) comprend un modulateur/transposeur de fréquence (7104) symétrique, un générateur (7142) de signaux de commande, un filtre (7106) optionnel et un amplificateur (7108) optionnel. L'émetteur (7102) convertit la fréquence d'un signal (7110) de bande de base pour produire un signal de sortie (7140) conditionne pour effectuer une transmission sans fil ou sur ligne métallique. Ainsi, le modulateur (7104) symétrique reçoit le signal (7110) de bande de base et échantillonne le signal de bande de base de manière différentielle et symétrique en fonction des premier et deuxième signaux de commande déphasés l'un par rapport à l'autre, créant ainsi un signal (7138) à richesse harmonique. Le signal (7138) à richesse harmonique obtenu comprend des images harmoniques se répétant dans les harmoniques des données de fréquence d'échantillonnage pour reformer le signal de bande de base.

#### Legal Status (Type, Date, Text)

Publication 20010215 A1 With international search report.  
Examination 20010525 Request for preliminary examination prior to end of  
19th month from priority date

Fulltext Availability:  
Detailed Description

Detailed Description

... near isochronous service to the stations on the polling list.  
The third function of the **MAC** is to protect the data that it delivers. Because it is difficult to contain **wireless** WLAN signals to a particular physical area, the **MAC** provides a privacy service, called Wired Equivalent Privacy (WEP), which **encrypts** the data sent over the **wireless** medium. The level of encryption chosen approximates the level of protection data might have on...

30/5,K/18 (Item 18 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00775324 \*\*Image available\*\*

METHOD FOR TRANSMISSION CONTROL PROTOCOL (TCP) RATE CONTROL WITH LINK-LAYER ACKNOWLEDGEMENTS IN A WIRELESS POINT TO MULTI-POINT (PtMP) TRANSMISSION SYSTEM

PROCEDE DE COMMANDE DE VITESSE D'UN PROTOCOLE TCP AVEC ACCUSES DE RECEPTION DE COUCHE DE LIAISON DANS UN SYSTEME DE TRANSMISSION POINT A MULTIPPOINT (PTMP) RADIO

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Inventor(s):

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Legal Representative:

MARHOEFER Laurence J (et al) (agent), Venable, P.O. Box 34385, Washington, DC 20043-9998, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200108372 A2-A3 20010201 (WO 0108372)

Application: WO 2000US18584 20000707 (PCT/WO US0018584)

Priority Application: US 99349477 19990709; US 99349480 19990709; US 99350126 19990709; US 99350118 19990709; US 99347856 19990709; US 99350150 19990709; US 99350156 19990709; US 99349476 19990709; US 99350170 19990709; US 99349481 19990709; US 99350159 19990709; US 99347857 19990709; US 99349475 19990709; US 99349483 19990709; US 99349479 19990709; US 99350162 19990709; US 99349975 19990709; US 99350173 19990709; US 99349482 19990709; US 99349478 19990709; US 99349474 19990709

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-012/56

International Patent Class: H04L-012/28

Publication Language: English

Filing Language: English

Fulltext Availability:



Detailed Description  
Claims  
Fulltext Word Count: 46202

#### English Abstract

A method for modifying operation of a transmission control protocol (TCP) sliding window algorithm in a wireless point to multi-point (PtMP) transmission system. The method includes ensuring that transport of a packet over a wireless telecommunications link is occurring reliably; and modifying operation of a TCP sliding window algorithm if transport is not occurring reliably in order to control a TCP transmission rate. The ensuring step includes awaiting acknowledgement of wireless transmission of the packet at a link layer over the wireless link; and retransmitting at the link layer a lost one of the packets. The link layer can be a packet-centric QoS aware media access control (MAC) layer. The modifying step includes suppressing transmission of a TCP layer communication that would cause the TCP sliding window algorithm to modify the TCP transmission rate. The suppressing step can include preventing a source TCP from retransmitting the packet. The suppressing step can include avoiding modification of a source TCP layer and a destination TCP layer. The source and destination TCP layers can be unaware of operation modification. The suppressing can include intercepting retransmission requests between a destination TCP layer of a subscriber workstation coupled to a subscriber CPE station which is in wireless communication with a wireless base station, and a source TCP layer of a host workstation coupled to the wireless base station. The method can include detecting real congestion and permitting transmission of a TCP layer communication that would cause the TCP sliding window algorithm to modify the TCP transmission rate if real congestion is detected. Here, the detecting step can include determining from the link layer whether the wireless transmission of the packet was acknowledged.

#### French Abstract

L'invention concerne un procede visant a modifier le fonctionnement d'un algorithme a fenetre glissante d'un protocole TCP dans un systeme de transmission point a multipoint (PtMP) radio. Le procede consiste a s'assurer que le transport d'un paquet sur un relais de telecommunication s'effectue de maniere fiable, et a modifier le fonctionnement d'un algorithme a fenetre glissante TCP si le transport ne s'effectue pas de maniere fiable afin de commander la vitesse de transmission TCP. Cette etape comprend l'attente de l'accuse de reception de la transmission radio du paquet a une couche de liaison sur la liaison radio, et la retransmission a la couche de liaison d'un paquet perdu. La couche de liaison peut etre une couche de commande d'accès au support (MAC) de qualite de service paquet-centrique. L'etape de modification comprend la suppression de la transmission d'une communication de la couche TCP pouvant provoquer la modification de la vitesse de transmission TCP par l'algorithme a fenetre glissante TCP. L'etape de suppression consiste a empêcher un TCP source de retransmettre le paquet, et a éviter la modification d'un TCP source et d'une couche TCP cible. Les couches TCP source et cible peuvent ne pas etre informees de la modification de fonctionnement. La suppression peut comprendre l'interception des demandes de retransmission entre une couche TCP cible de la station de travail d'un abonne couplee a une station CPE d'abonne en communication radio avec une station de base radio, et une couche TCP source d'une station de travail hôte couplee a une station de base radio. Le procede consiste a detecter un encombrement reel et a permettre la transmission d'une communication de la couche TCP pouvant provoquer la modification de la vitesse de transmission TCP par l'algorithme a fenetre glissante TCP si un encombrement reel est detecte. L'etape de detection consiste a determiner a partir de la couche de liaison si la transmission radio du

paquet fait l'objet d'un accuse de reception.

Legal Status (Type, Date, Text)

Publication 20010201 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010726 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20021219 Late publication of international search report  
Republication 20021219 A3 With international search report.  
Search Rpt 20021219 Late publication of international search report  
Correction 20030530 Corrected version of Pamphlet: pages 1/41-41/41, drawings, replaced by new pages 1/41-41/41  
Republication 20030530 A3 With international search report.

Fulltext Availability:

Detailed Description

Detailed Description

... gateway 1706e and firewall to IP network layer 1708e and 1708d and then down through **encryption** layer 1706d, io PRIMMA **MAC** layer 1704d and down to **wireless** link to subscriber CPE 294d.

Subscriber CPE 294d flows packet IP flows up from antenna 292d at physical **wireless** layer 1702c up through **MAC** layer 1704c, through **encryption** layer 1706c, through IP layers 1708 b and 1708c, then down through optional layer 1706b...satellite link, to antenna 290d of wireless base station 302 at wireless physical layer 1802d.

**Wireless** base station 302 flows packet IP flows up from antenna 290d at physical **wireless** layer 1802d up through **MAC** layer 1804d, through IPsec layers 1806d and 1806d, !5 which can encapsulate packets and **encrypt** them. From IPsec layer 1806e, IP flows can flow - 146 down through WAN layer 1804e...

30/5,K/19 (Item 19 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00771574 \*\*Image available\*\*

TDMA/TDD ACCESS METHOD FOR A WIRELESS TRANSMISSION SYSTEM

AMRT/DRT PROCEDE D'ACCES POUR UN SYSTEME DE TRANSMISSION SANS FIL

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Inventor(s):

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Legal Representative:

MARHOEFER Laurence J, Venable, P.O. Box 34385, Washington, DC 20043-9998, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200105100 A1 20010118 (WO 0105100)

Application: WO 2000US18666 20000707 (PCT/WO US0018666)

Priority Application: US 99349477 19990709; US 99349480 19990709; US 99350126 19990709; US 99350118 19990709; US 99347856 19990709; US 99350150 19990709; US 99350156 19990709; US 99349476 19990709; US 99350170 19990709; US 99349481 19990709; US 99350159 19990709; US 99347857 19990709; US 99349475 19990709; US 99349483 19990709; US 99349479 19990709; US 99350162 19990709; US 99349975 19990709; US 99350173 19990709; US 99349482 19990709; US 99349478 19990709; US 99349474 19990709

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-012/28

International Patent Class: H04L-012/56; H04L-029/06

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 46658

English Abstract

A time domain multiple access/time division duplex (TDMA/TDD) media access control (MAC) telecommunications access method which includes the steps of accessing one or more dynamically allocatable control packets for providing control information over a wireless medium between a wireless base station and one or more subscriber customer premises equipment (CPE) stations, and accessing one or more dynamically allocatable data packets for providing data information over a wireless medium between a wireless base station and one or more subscriber customer premises equipment (CPE) stations is disclosed. An aspect of the invention includes the steps of communicating a downstream acknowledgment, communicating a reservation request, communicating operations data, communicating an upstream acknowledgment slot, communicating an acknowledgment request slot, communicating a frame descriptor slot, and communicating a command and control slot.

French Abstract

Un procede d'accès aux telecommunications a commande d'accès au support (MAC) a accès multiple par repartition dans le temps/duplex a repartition dans le temps (AMRT/DRT) comprend les etapes consistant a accéder a un ou a plusieurs paquets de commande affectables dynamiquement destines a fournir des informations de commande par un support sans fil entre une station de base sans fil et une ou plusieurs stations d'equipement prive d'abonnes (EPA), et a accéder a un ou a plusieurs paquets de donnees affectables dynamiquement destines a fournir des informations sur les donnees par un support sans fil entre une station de base sans fil et une ou plusieurs stations d'equipement prive d'abonnes (EPA). Un aspect de l'invention comprend les etapes de communication d'un accuse de reception aval, de communication d'une demande de reservation, de communication de donnees operationnelles, de communication d'un intervalle d'accuse de reception amont, de communication d'un intervalle de demande d'accuse de reception, de communication d'un intervalle de descripteur de trame et de communication d'un intervalle d'instruction et de commande.

Legal Status (Type, Date, Text)

Publication 20010118 A1 With international search report.

Publication 20010118 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

Examination 20010503 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:

Detailed Description

Detailed Description

... gateway 1706e and firewall to IP network layer 1708e and 1708d and then down through **encryption** layer 1706d, PRIMMA **MAC** layer 1704d and down to **wireless** link to subscriber CPE 294d.

Subscriber CPE 294d flows packet IP flows up from antenna 292d at physical **wireless** layer 1702c up through **MAC** layer 1704c, through **encryption** layer 1706c, through IP layers 1708 b and 1708c, then down through optional layer 1706b...

...satellite link, to antenna 290d of wireless base station 302 at wireless physical layer 1802d.

**Wireless** base station 302 flows packet IP flows up from antenna 290d at physical - 147 **wireless** layer 1802d up through **MAC** layer 1804d, through 1Psec layers 1806d and 1806d, which can encapsulate packets and **encrypt** them. From 1Psec layer 1806e, IP flows can flow down through WAN layer 1804e and...

30/5,K/20 (Item 20 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00771573 \*\*Image available\*\*

TCP/IP-CENTRIC QOS-AWARE ACCESS FRAME IN A WIRELESS TRANSMISSION SYSTEM  
TRAME DE CONTROLE DE TRANSMISSION/PROTOCOLE INTERNET (TCP/IP)-CENTRIQUE  
DANS UN SYSTEME DE TRANSMISSION SANS FIL

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Washington, DC 20043-9998, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200105099 A1 20010118 (WO 0105099)

Application: WO 2000US18585 20000707 (PCT/WO US0018585)

Priority Application: US 99349477 19990709; US 99349480 19990709; US  
99350126 19990709; US 99350118 19990709; US 99347856 19990709; US  
99350150 19990709; US 99350156 19990709; US 99349476 19990709; US  
99350170 19990709; US 99349481 19990709; US 99350159 19990709; US  
99347857 19990709; US 99349475 19990709; US 99349483 19990709; US  
99349479 19990709; US 99350162 19990709; US 99349975 19990709; US  
99350173 19990709; US 99349482 19990709; US 99349478 19990709; US  
99349474 19990709

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM  
Main International Patent Class: H04L-012/28  
International Patent Class: H04L-012/56; H04L-029/06  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims

Fulltext Word Count: 48784

English Abstract

A packet centric wireless point-to-multipoint (PtMP) telecommunications system is provided. The telecommunications system includes a wireless network that provides for true QoS. A media access control (MAC) layer is used in a packet-centric wireless point to multi-point (PtMP) telecommunications system, the telecommunication system includes a wireless base station coupled to a first data network, one or more host workstations coupled to the first data network, one or more subscriber customer premise equipment (CPE) stations in wireless communication with the wireless base station over a shared bandwidth using a packet-centric protocol, and one or more subscriber workstations coupled to each of the subscriber CPE stations over a second network. The MAC layer includes a resource allocation means that allocates shared bandwidth among the subscriber CPE stations to optimize end-user quality of service (QoS).

French Abstract

L'invention concerne un systeme de telecommunications paquet-centrique point-a-multipoint sans fil. Le systeme de telecommunications comporte un reseau sans fil qui fournit une veritable qualite de service (QS). L'invention concerne egalement une couche de controle d'accès au support (MAC), utilisee dans ledit systeme. Ce dernier comporte une station de base sans fil couplee a un premier reseau de donnees, une ou plusieurs stations de travail hotes couplees a ce premier reseau de donnees, une ou plusieurs stations d'installations d'abonnees (CPE) en communication sans fil avec la station de base sans fil sur une largeur de bande partagee, au moyen d'un protocole paquet-centrique, et une ou plusieurs stations de travail abonnee couplees a chacune des stations CPE par un second reseau. La couche MAC comporte un dispositif d'allocation de ressources qui repartit la largeur de bande partagee entre les stations CPE abonne afin d'optimiser la qualite de service de l'utilisateur final (QoS).

Legal Status (Type, Date, Text)

Publication	20010118	A1 With international search report.
Publication	20010118	A1 Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.
Examination	20010719	Request for preliminary examination prior to end of 19th month from priority date
Correction	20020725	Corrected version of Pamphlet: pages 1/41-41/41, drawings, replaced by new pages 1/41-41/41; due to late transmittal by the receiving Office
Republication	20020725	A1 With international search report.

Fulltext Availability:  
Detailed Description

Detailed Description

... gateway 1706e and firewall to IP network layer 1708e and 1708d and then down through **encryption** layer 1706d, PRIMMA **MAC** layer 1704d and down to **wireless** link to subscriber CPE 294d.

Subscriber CPE 294d flows packet IP flows up from antenna 292d at

physical **wireless** layer 1702c up through **MAC** layer 1704c. through **encryption** layer 1706c, through IP layers 1708 b and 1708c, then down through optional layer 1706b...

...satellite link. to antenna 290d of wireless base station 302 at wireless physical layer 1802d.

**Wireless** base station 302 flows packet IP flows up from antenna 290d at physical - 149 **wireless** layer 1802d up through **MAC** layer 1804d, through 1Psec layers 1806d and 1806d, which can encapsulate packets and **encrypt** them. From 1Psec layer 1806e, IP flows can flow down through WAN layer 1804e and...

30/5,K/21 (Item 21 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00771572 \*\*Image available\*\*

**TCP/IP PACKET-CENTRIC WIRELESS TRANSMISSION SYSTEM ARCHITECTURE**  
**ARCHITECTURE DE SYSTEME DE TRANSMISSION POINT A MULTIPPOINT (PTMP) SANS FIL**  
**A BASE DE PAQUETS POUR PROTOCOLE TCP/IP**

Patent Applicant/Assignee:

MALIBU NETWORKS INC, Suite 130, 1035 Suncast Lane, El Dorado Hills, CA  
95762, US, US (Residence), US (Nationality)

Inventor(s):

JORGENSEN Jacob W, 154 Black Powder Circle, Folsom, CA 95630, US

Legal Representative:

MARHOEFER Laurence J, Venable, P.O. Box 34385, Washington, DC 20043-9998,  
US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200105098 A1 20010118 (WO 0105098)

Application: WO 2000US18531 20000707 (PCT/WO US0018531)

Priority Application: US 99349477 19990709; US 99349480 19990709; US  
99350126 19990709; US 99350118 19990709; US 99347856 19990709; US  
99350150 19990709; US 99350156 19990709; US 99349476 19990709; US  
99350170 19990709; US 99349481 19990709; US 99350159 19990709; US  
99347857 19990709; US 99349475 19990709; US 99349483 19990709; US  
99349479 19990709; US 99350162 19990709; US 99349975 19990709; US  
99350173 19990709; US 99349482 19990709; US 99349478 19990709; US  
99349474 19990709

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04L-012/28

International Patent Class: H04L-012/56; H04L-029/06

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 59235

#### English Abstract

A packet-centric wireless point to multi-point telecommunications system includes: a wireless base station communicating via a packet-centric protocol to a first data network; one or more host workstations communicating via the packet-centric protocol to the first data network; one or more subscriber customer premise equipment (CPE) stations coupled with the wireless base station over a shared bandwidth via the packet-centric protocol over a wireless medium; and one or more subscriber workstations coupled via the packet-centric protocol to each of the subscriber CPE stations over a second network. The packet-centric protocol can be transmission control protocol/internet protocol (TCP/IP). The packet-centric protocol can be a user datagram protocol/internet protocol (UDP/IP). The system can include a resource allocation means for allocating shared bandwidth among the subscriber CPE stations. The resource allocation is performed to optimize end-user quality of service (QoS).

#### French Abstract

L'invention concerne un systeme de telecommunication point a multipoint sans fil a base de paquets comprenant une station de base sans fil communiquant par l'intermediaire d'un protocole a base de paquets avec un premier reseau de donnees, une ou plusieurs stations de travail hotes communiquant par l'intermediaire de ce protocole a base de paquets avec le premier reseau de donnees, une ou plusieurs stations d'equipement prive d'abonne (EPA) connectees a la station de base sans fil sur une largeur de bande partagee par l'intermediaire du protocole a base de paquets sur un support sans fil, et une ou plusieurs stations de travail d'abonne connectees a chacune des stations EPA sur un second reseau par l'intermediaire du protocole a base de paquets. Le protocole a base de paquets peut etre un protocole de controle de transmission (TCP) ou un protocole Internet (IP). Le protocole a base de paquets peut etre un protocole de datagramme utilisateur (UDP) ou un protocole Internet (IP). Le systeme peut comprendre un dispositif d'affectation de ressources destine a repartir une largeur de bande partagee entre les stations EPA. L'affectation de ressources sert a optimaliser la qualite de service pour un utilisateur final.

#### Legal Status (Type, Date, Text)

Publication 20010118 A1 With international search report.

Publication 20010118 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

Examination 20010405 Request for preliminary examination prior to end of 19th month from priority date

#### Fulltext Availability:

Detailed Description

#### Detailed Description

... gateway 1706e and firewall to IP network layer 1708e and 1708d and then down through **encryption** layer 1706d, PRIMMA **MAC** layer 1704d and down to **wireless** link to subscriber CPE 294d.

Subscriber CPE 294d flows packet IP flows up from antenna 292d at physical **wireless** layer 1702c up through **MAC** layer 1704c, through **encryption** layer 1706c, through IP layers 1708 b and 1708c, then down through optional layer 1706b...satellite link, to antenna 290d of wireless base station 302 at wireless physical layer 1802d.

**Wireless** base station 302 flows packet IP flows up from antenna 290d at physical **wireless** layer 1802d up through **MAC** layer 1804d, through IPsec layers 1806d and 1806d, which can encapsulate packets and **encrypt**

them. From IPsec layer 1806e, IP flows can flow 165 down through WAN layer 1804e...

30/5,K/22 (Item 22 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00530879 \*\*Image available\*\*

METHOD AND APPARATUS FOR A DATA TRANSMISSION OF 100 MBPS IN A TERMINAL  
PROCEDE ET APPAREIL PERMETTANT D'OBTENIR UNE VITESSE DE TRANSMISSION DE  
DONNEES DE L'ORDRE DE MULTIPLES DE 100 MB/S DANS UN TERMINAL

Patent Applicant/Assignee:

WINNET MCS INC,

Inventor(s):

TREADAWAY Kirk,

HUEN Tat,

LE NGOC Tho,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9962231 A1 19991202

Application: WO 99US11137 19990520 (PCT/WO US9911137)

Priority Application: US 9886459 19980522; US 98177751 19981023

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

NO AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: H04L-012/46

International Patent Class: H04B-007/24

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 19198

#### English Abstract

A method and apparatus for a data transmission rate of multiples of 100 mega-bits per second (Mbps) in a terminal for a wireless metropolitan area network. A terminal includes a first media access control unit (MAC) unit for receiving Fast Ethernet data packets at a rate of 100 Mbps for communication over a wireless link, n-1 additional MAC units for receiving Fast Ethernet data packets at a rate of 100 Mbps for communication over the wireless link, a multiplexer having n inputs, wherein each input is coupled to receive the data packets from a corresponding one of the MAC units and wherein the output of the multiplexer provides time-division multiplexed data, a packet formatting apparatus coupled to the output of the multiplexer for formatting the time division multiplexed data according to radio frames, and a wireless transceiver coupled to the packet formatting apparatus for communicating the radio frames over a wireless link wherein the wireless link has a maximum bandwidth capacity of at least n times 100 Mbps. Each MAC unit can include a rate control unit and a rate buffer for temporarily storing data packets received by the corresponding MAC unit prior to providing them to a corresponding one of the inputs of the multiplexer. Each MAC unit can include a corresponding layer-two or layer-three switch having a 100 Mbps port. The maximum transmission rate is limited only by the bandwidth of the wireless link.

#### French Abstract

L'invention concerne un procede et un appareil permettant d'obtenir une vitesse de transmission de donnees de l'ordre de multiples de 100 mb/s dans un terminal pour un reseau metropolitain sans fil. Un terminal



comporte une premiere unite de commande d'accès au support (MAC) pour recevoir des paquets de données Ethernet Rapide a une vitesse de 100 Mb/s pour communiquer via une liaison sans fil. Ce terminal comporte également n-1 unites MAC supplementaires pour recevoir des paquets de données Ethernet Rapide a une vitesse de 100 Mb/s pour communiquer via ladite liaison sans fil. Ce terminal comporte également un multiplexeur pourvu de n entrees, chaque entree etant couplee pour recevoir les paquets de données d'une unite MAC correspondante et la sortie du multiplexeur fournissant des données mulitplexees dans le temps. Ce terminal comporte également un appareil de formatage de paquets couple a la sortie du multiplexeur pour formater les données mulitplexees dans le temps en fonction de trames radio. Ce terminal comporte enfin un emetteur-recepteur sans fil couple a l'appareil de formatage de paquets pour transmettre les trames radio via une liaison sans fil, celle-ci ayant une capacite maximale de largeur de bande d'au moins n fois 100 Mb/s. Chaque unite MAC peut comporter une unite de commande de vitesse et un tampon de vitesse pour memoriser provisoirement des paquets de données recus par l'unite MAC correspondante avant de fournir ces paquets de données a une sortie correspondante du multiplexeur. Chaque unite MAC peut comporter un commutateur couche-deux ou couche-trois correspondant qui comporte un port 100 Mb/s. La vitesse de transmission maximale n'est limitee que par la largeur de bande de la liaison sans fil.

Fulltext Availability:  
Detailed Description

#### Detailed Description

... provided to the second input of the multiplexer from the second rate buffers. The first **MAC** unit can include a first data **encryption** apparatus coupled to the first data packet switch. The second **MAC** unit can include a second data **encryption** apparatus coupled to the second data packet switch.

According to yet another aspect of the present invention, a terminal for a **wireless** link in a metropolitan area includes a first **MAC** unit for receiving Fast Ethernet data packets at a rate of 100 Mbps for communication over a **wireless** link, n-1 additional **MAC** units for receiving Fast Ethernet data packets at a rate of 100 Mbps for communication over the **wireless** link, a multiplexer having n inputs, wherein each input is coupled to receive the data...

30/5,K/23 (Item 23 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00530878 \*\*Image available\*\*

**ETHERNET SWITCH IN A TERMINAL FOR A WIRELESS METROPOLITAN AREA NETWORK**  
**COMMUTATEUR ETHERNET DANS UN TERMINAL POUR RESEAU RADIO METROPOLITAIN**

Patent Applicant/Assignee:

WINNET MCS INC,

Inventor(s):

TREADAWAY Kirk,

HUEN Tat,

LE NGOC Tho,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9962230 A1 19991202

Application: WO 99US11123 19990520 (PCT/WO US9911123)

Priority Application: US 9886459 19980522; US 98218253 19981221

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

NO AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: H04L-012/46

International Patent Class: H04B-007/24

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 18977

#### English Abstract

Method and apparatus for an Ethernet switch in a terminal for a wireless metropolitan area network. In accordance with an aspect of the invention, a terminal for a wireless link in a metropolitan area network includes a network switch having a first port for receiving the data packets from a computer network and a second port for forwarding the data packets; rate buffers coupled to the network switch for receiving the data packets from the second port; and a wireless transceiver coupled to the rate buffers for receiving the data packets from the rate buffers and for communicating the data packets over the wireless link. The data packets can be Fast Ethernet data packets and the network switch can include a 100 mega-bits-per-second port for receiving the Fast Ethernet packets. The terminal can include a packet buffer for storing the data packets prior to storing the data packets in the rate buffer. The network switch can be a layer-two switch. The network switch can store the data packets in the packet buffer in response to a level of space available in the rate buffer, in response to rain fade in the wireless link, in response to interference in the wireless link, or in response to a detected bit error rate for communication via the wireless link. The terminal can include an extender device coupled to the broadcast device for receiving the data packets from the computer network and for providing the data packets to the broadcast device.

#### French Abstract

La presente invention concerne un procede et un dispositif de commutation Ethernet dans un terminal pour reseau radio metropolitain. Selon un aspect de l'invention, un terminal pour liaison radio dans un reseau metropolitain comprend les elements suivants : commutateur dote d'un premier port destine a la reception de paquets de donnees en provenance d'un ordinateur et d'un second port pour l'acheminement de ces paquets de donnees ; tampons de debit couples au commutateur reseau et recevant les paquets de donnees du second port ; et emetteur-recepteur radio couple aux tampons de debit dont il recoit des paquets de donnees pour les transmettre par radio. Ces paquets de donnees peuvent etre des paquets de donnees Ethernet Rapide et le commutateur de reseau peut inclure un port de 100 megabits/seconde pour la reception de ces paquets de donnees. Le terminal peut comporter un tampon pour le stockage de paquets de donnees avant de les stocker dans le tampon de debit. Le commutateur reseau peut etre un commutateur de couche deux. Il peut stocker les paquets de donnees dans le tampon pour paquets en reponse a un volume d'espace disponible dans le tampon de debit, a un affaiblissement du signal du a la pluie dans le reseau, a une interference dans la liaison radio ou a un taux d'erreur sur les bits detecte pour la communication via la liaison radio. Le terminal peut comporter un dispositif d'extension couple au dispositif de diffusion pour la reception de paquets de donnees a partir du reseau informatique et pour la fourniture de paquets de donnees au dispositif de diffusion.

Fulltext Availability:

Detailed Description

Detailed Description

... to the IOOBASE-T transceiver 212. Thus, latency-intolerant traffic will be transmitted via the **wireless** link 102 with minimal delay even during periods of rain fade or interference.

In addition, the embodiment of the **MAC** 222' illustrated in Fig. 16 includes an **encryption / decryption** block 612 coupled between the rate control logic 250' and the rate buffers 252'. Accordingly...

File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 18  
(c) 2004 The Dialog Corp.  
File 9:Business & Industry(R) Jul/1994-2004/Aug 18  
(c) 2004 The Gale Group  
File 15:ABI/Inform(R) 1971-2004/Aug 18  
(c) 2004 ProQuest Info&Learning  
File 98:General Sci Abs/Full-Text 1984-2004/Jul  
(c) 2004 The HW Wilson Co.  
File 112:UBM Industry News 1998-2004/Jan 27  
(c) 2004 United Business Media  
File 141:Readers Guide 1983-2004/Jul  
(c) 2004 The HW Wilson Co  
File 484:Periodical Abs Plustext 1986-2004/Aug W2  
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File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 613:PR Newswire 1999-2004/Aug 19  
(c) 2004 PR Newswire Association Inc  
File 635:Business Dateline(R) 1985-2004/Aug 18  
(c) 2004 ProQuest Info&Learning

Set	Items	Description
S1	102258	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSPECIFIC) (1W)ACCESS??? ?(1W)(CONTROL??? ? OR CONTROLL??? ?)
S2	69367	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT?
S3	24001	DECRYPT? OR UNENCRYPT? OR UNENCRYPT? OR UNENCRYPT? OR UNENCRYPT? OR UNENCRYPT? OR UNENCRYPT? OR UNENCRYPT?
S4	1993029	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	768309	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	245812	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK)()PAD
S7	253070	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	6615	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	38176	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (-DIGITAL OR DATA) () (ASSISTANT? ? OR ORGANIZER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	270737	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR -MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W) - (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S11	58190	RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR -APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)
S12	57210	RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?
S13	15	PERSONAL()DISPLAY? () (DEVICE? OR UNIT?? OR APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR COMPUTER? ?)
S14	1039900	SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR -WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCKET OR IR OR INFRARED
S15	175316	S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANIZER? OR TERMINAL? OR APPLIANCE?)
S16	7583	(VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR -PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S17	54428	PALMSIZE? OR PALMHOLD OR HANDY? ? OR FLIPPHONE? OR VIDEOPHONE? OR PICTUREPHONE?

S18	612	S1(25N)S2:S3
S19	2631	S1(25N)S5
S20	99	S18(S)S19
S21	47	S18(S)(S6:S13 OR S15:S17)
S22	120	S20:S21
S23	109	S22/2001:2004
S24	11	S22 NOT S23
S25	8	RD (unique items)
?		

File 347: JAPIO Nov 1976-2004/Apr(Updated 040802)  
(c) 2004 JPO & JAPIO  
File 350: Derwent WPIX 1963-2004/UD,UM &UP=200453  
(c) 2004 Thomson Derwent  
File 348: EUROPEAN PATENTS 1978-2004/Aug W02  
(c) 2004 European Patent Office  
File 349: PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805  
(c) 2004 WIPO/Univentio

Set	Items	Description
S1	2	AU=DELLMO R?
S2	201	AU=BERGMAN J?
S3	1091	AU=HALL D?
S4	20254	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSP- ECIFIC) (1W)ACCESS??? ?(1W) (CONTROL??? ? OR CONTROL??? ?)
S5	4	S1:S3 AND S4

5/9/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX  
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014885212 \*\*Image available\*\*  
WPI Acc No: 2002-705918/200276  
XRPX Acc No: N02-556502

**Secure wireless local area network device e.g. laptop computer has  
cryptography circuit which renders cryptographic information unusable by  
disconnecting battery from volatile memory, responsive to tampering**

Patent Assignee: HARRIS CORP (HARO )

Inventor: BERGMAN J ; DELLMO R ; HALL D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020095594	A1	20020718	US 2001761173	A	20010116	200276 B

Priority Applications (No Type Date): US 2001761173 A 20010116

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020095594	A1	17	H04L-009/10	

Abstract (Basic): US 20020095594 A1

NOVELTY - A housing includes a cryptography circuit with a switch connected to a wireless transceiver, a **media access controller** . The switch disconnects battery from volatile memory rendering the cryptography information unusable, upon tampering the device.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Secure wireless local area network (LAN) system; and
- (2) Tamper resistant wireless local area network forming method.

USE - Secure wireless local area network device such as laptop computer.

ADVANTAGE - Provides greater security inexpensively with less complexity.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the laptop computer.

pp; 17 DwgNo 2/13

Title Terms: SECURE; WIRELESS; LOCAL; AREA; NETWORK; DEVICE; COMPUTER; CIRCUIT; RENDER; CRYPTOGRAPHIC; INFORMATION; DISCONNECT; BATTERY; VOLATILE; MEMORY; RESPOND; TAMPER

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/10

File Segment: EPI

Manual Codes (EPI/S-X): T01-M06A1A; W01-A05A; W01-A06B5A; W01-A06C4

5/9/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014815328 \*\*Image available\*\*

WPI Acc No: 2002-636034/200268

XRPX Acc No: N02-502533

**Secure wireless local area network device has cryptography circuit which is connected to medium access controller and wireless transceiver for encrypting and decrypting address and data for communication**

Patent Assignee: HARRIS CORP (HARO )

Inventor: BERGMAN J ; DELIMO R ; HALL D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020094087	A1	20020718	US 2001760619	A	20010116	200268 B

Priority Applications (No Type Date): US 2001760619 A 20010116

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020094087	A1	17	H04K-001/00	

Abstract (Basic): US 20020094087 A1

NOVELTY - A cryptography circuit (70) is connected to a wireless transceiver (50) and a **medium access controller** (60). The cryptography circuit encrypts/decrypts both address and the data information for transmission/reception.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a secure wireless local area network provision method.

USE - Secure wireless local area network (LAN) device.

ADVANTAGE - Provides greater security without significant increase in cost and complexity, by using the cryptography circuit.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of a secure wireless LAN device.

Wireless transceiver (50)

**Medium access controller** (60)

Cryptography circuit (70)

pp; 17 DwgNo 7/13

Title Terms: SECURE; WIRELESS; LOCAL; AREA; NETWORK; DEVICE; CIRCUIT;

CONNECT; MEDIUM; ACCESS; CONTROL; WIRELESS; TRANSCEIVER; ADDRESS; DATA; COMMUNICATE

Derwent Class: T01; W01

International Patent Class (Main): H04K-001/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-D01; T01-N02A2; W01-A05A; W01-A06B5A; W01-A06C4 ; W01-A06E1

? t5/k/3-4

**5/K/3 (Item 1 from file: 349)**

DIALOG(R)File 349:(c) 2004 WIPO/Univentio. All rts. reserv.

Patent Applicant/Inventor:

... Designated only for: US)

**HALL David A** ...

Fulltext Availability:

Detailed Description

Detailed Description

... adapted to execute any of the  
well-known MS-DOS, PC-DOS, OS/2, UNIX, **MAC** -OS, mainframe,  
minicomputer and Windows operating systems or other  
operating systems. General purpose computer 37...

**5/K/4 (Item 2 from file: 349)**

DIALOG(R)File 349:(c) 2004 WIPO/Univentio. All rts. reserv.

Inventor(s):

... **HALL Douglas**

Fulltext Availability:

Detailed Description

Detailed Description

... damp equ h'00401 ;high damping size

211

212

213 XhC gauge variables

214 -----

215 **mac** aauae res 2 ;10 bit gauge position

216 gauge-buffer res 2 ;gauge data buffer...FilenwLe: Dsp  
angle.gag

Date C.' :eated:7/18/97

4 Description: Display angle through **MAC** gauge

Inputs- datal(b3,b2) angle (12.4 format)

8 Returns: none

10 Modified: addrl, **mac** -gauge

Program Flow.

14 ; ...Transfer 10 bits to driver chip

16 ;



File 9:Business & Industry(R) Jul/1994-2004/Aug 18  
(c) 2004 The Gale Group  
File 16:Gale Group PROMT(R) 1990-2004/Aug 19  
(c) 2004 The Gale Group  
File 47:Gale Group Magazine DB(TM) 1959-2004/Aug 19  
(c) 2004 The Gale group  
File 148:Gale Group Trade & Industry DB 1976-2004/Aug 19  
(c)2004 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2004/Aug 19  
(c) 2004 The Gale Group  
File 570:Gale Group MARS(R) 1984-2004/Aug 19  
(c) 2004 The Gale Group  
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Aug 19  
(c) 2004 The Gale Group  
File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 19  
(c) 2004 The Gale Group  
File 649:Gale Group Newswire ASAP(TM) 2004/Aug 13  
(c) 2004 The Gale Group

Set	Items	Description
S1	367103	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSPECIFIC) (1W)ACCESS??? ? (1W) (CONTROL??? ? OR CONTROLL??? ?)
S2	242623	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT?
S3	45532	DECRYPT? OR UNENCRYPT? OR UNENCIPHER? OR UNENCYIPHER? OR DECRYPT? OR DECRYPT? OR UNCRYPT? OR UNCRYPT? OR UNCRYPT?
S4	4522640	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	2418378	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	801426	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK) ()PAD
S7	617044	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	25600	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	117774	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (-DIGITAL OR DATA) () (ASSISTANT? ? OR ORGANIZER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	771622	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR -MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W) - (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S11	139162	RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR -APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)
S12	106888	RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?
S13	72	PERSONAL()DISPLAY? () (DEVICE? OR UNIT?? OR APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR COMPUTER? ?)
S14	3053628	SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR -WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCKET OR IR OR INFRARED
S15	603620	S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANIZER? OR TERMINAL? OR APPLIANCE?)
S16	23269	(VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR -PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S17	114747	PALMSIZE? OR PALMHOLD OR HANDY? ? OR FLIPPHONE? OR VIDEOPHONE? OR PICTUREPHONE?
S18	1405	S1(10N)S2:S3
S19	5898	S1(10N)S5

S20	105	S18(S)S19
S21	92	S18(S) (S6:S13 OR S15:S17)
S22	163	S20:S21
S23	140	S22/2001:2004
S24	23	S22 NOT S23
S25	7	RD (unique items)
S26	1805	S1(15N)S2:S3
S27	7791	S1(15N)S5
S28	207	S26(S)S27
S29	110	S26(S) (S6:S13 OR S15:S17)
S30	256	S28:S29
S31	209	S30/2001:2004
S32	24	S30 NOT (S31 OR S22)
S33	11	RD (unique items)
S34	2627	S1(25N)S2:S3
S35	11001	S1(25N)S5
S36	375	S34(S)S35
S37	164	S34(S) (S6:S13 OR S15:S17)
S38	451	S36:S37
S39	363	S38/2001:2004
S40	41	S38 NOT (S39 OR S22 OR S30)
S41	18	RD (unique items)

25/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

06951970 Supplier Number: 58729279 (USE FORMAT 7 FOR FULLTEXT)  
**No Wires Needed Acquires \$5.5 Million in Venture Capital Funding.**  
Business Wire, p0290  
Jan 20, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 621

... bit security architecture is the only solution in the industry that does not require bothersome **encryption** key management. The Company also has existing **medium access controller (MAC)** technology that enables the next generation of **wireless** LAN products.

In 1999, No Wires Needed enjoyed a ten-fold increase in revenue over

...

25/3,K/2 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

06279598 Supplier Number: 54414369 (USE FORMAT 7 FOR FULLTEXT)  
**Wireless: New Low Cost, High Performance Wireless Bridge From Wave Wireless Networking. (Wave Wireless Networking' SPEEDLAN XE-2 wireless) (Product Announcement)**  
EDGE: Work-Group Computing Report, pNA  
April 12, 1999  
Language: English Record Type: Fulltext  
Article Type: Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 450

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...bridges but at a much lower cost. Unlike many products on the market today, advanced **MAC** layer filtering, IP Routing, data **encryption** and SNMP management are all included as standard features. SPEEDLAN XE-2 supports everything from...

...a Base Station, the XE-2 can support up to 16 remote locations. This single, **self - contained unit** can easily integrate into almost any network environment in just one afternoon. The SPEEDLAN XE...

25/3,K/3 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

05832811 Supplier Number: 50343246 (USE FORMAT 7 FOR FULLTEXT)  
**Protocol packs wireless voice, data**  
Moy, T Dennis; Negus, Kevin J.  
Electronic Engineering Times, n1029, p76  
Oct 5, 1998  
Language: English Record Type: Fulltext  
Article Type: Article  
Document Type: Magazine/Journal; Trade  
Word Count: 1037

... CA access mechanisms. This is derived from the IEEE 802-11.1997, "IEEE Standard for **Wireless LAN Medium Access Control** and Physical Layer Specification," that was approved in June 1997. The MAC protocol will accommodate...

...24-bit network ID. In addition, users can ensure data security with three levels of **encryption** (none, medium, high).

In operation, the **MAC** protocol uses a "superframe," which incorporates two contention-free periods (CFPs) and a contention period...

25/3,K/7 (Item 1 from file: 160)  
DIALOG(R) File 160:Gale Group PROMT(R)  
(c) 1999 The Gale Group. All rts. reserv.

02244540  
**Business: Taurus Communications, Inc**  
Satellite Communications August, 1989 p. 36  
ISSN: 0147-7439

Scientific Atlanta has sold its **mobile B- MAC encryption** systems to Taurus Communications. The purchase leaves Taurus with 4% of B-MAC signal protection...

33/3,K/2 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

07571919 Supplier Number: 63494750 (USE FORMAT 7 FOR FULLTEXT)  
**Buffalo Technology Launches AirStation; Affordable, Wi-Fi Compatible System  
Brings the Mobility, Speed and Security of Wireless Networking to the  
Masses.**  
Business Wire, p2426  
July 17, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 532

... throughout the AirStation network are protected. These features  
include a highly secure DSSS modulation platform, **MAC** addressing that  
"closes the door" to unregistered access, and a WEP 40-bit **wireless**  
packet **encryption** process that secures the data without sacrificing  
throughput speed.

Standardized Networking Means Additional Flexibility  
To...

33/3,K/3 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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06834178 Supplier Number: 57817274 (USE FORMAT 7 FOR FULLTEXT)  
**Lucent WaveLAN Turbo PC Card Leads the Way in Price, Features. (wireless LAN  
adapter) (Hardware Review) (Evaluation)**  
Molta, Dave  
Network Computing, p22  
Nov 29, 1999  
Language: English Record Type: Fulltext  
Article Type: Evaluation  
Document Type: Magazine/Journal; Trade  
Word Count: 1054

... configure specialized parameters using tabbed dialog boxes. I  
easily enabled and disabled power management and **encryption**. On the  
downside, Lucent makes it easy for users to change the adapter's **MAC** (  
**Media Access Control**) address, a feature I've never quite understood,  
given that many **wireless** access points use **MAC** -address filtering for  
security purposes.

Lucent also provides client software that makes it relatively easy...

33/3,K/4 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

06254356 Supplier Number: 54296224 (USE FORMAT 7 FOR FULLTEXT)  
**New Low Cost, High Performance Wireless Bridge From Wave Wireless  
Networking.**  
Business Wire, p1253  
April 6, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 479

... of up to 25 miles, SPEEDLAN XE-2 provides many features common to more expensive **wireless** bridges but at a much lower cost. Unlike many products on the market today, advanced **MAC** layer filtering, IP Routing, data **encryption** and SNMP management are all included as standard features.

SPEEDLAN XE-2 supports everything from...

**33/3,K/6 (Item 1 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2004 The Gale Group. All rts. reserv.

07289525 SUPPLIER NUMBER: 16056664 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**iTran offers OLTP front end. (online transaction processing) (Independence Technologies Inc.) (Brief Article) (Product Announcement)**

Staten, James

MacWEEK, v8, n25, p18(1)

June 20, 1994

DOCUMENT TYPE: Product Announcement ISSN: 0892-8118 LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 201 LINE COUNT: 00016

... basic banking functions, such as deposits and transfers, entered on the Newton.

iTran for the **Mac** will be delivered in late summer; the **Newton** version will ship later this year. Data **encryption** capabilities will be available on request. iTran costs about \$200 per client, depending on configuration...

**33/3,K/8 (Item 1 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

04760318 Supplier Number: 64435072 (USE FORMAT 7 FOR FULLTEXT)

**BUFFALO TECHNOLOGY LAUNCHES AIRSTATION WLAN SOLUTION.**

LAN Product News, v12, n9, pNA

Sept, 2000

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 525

... throughout the AirStation network are protected. These features include a highly secure DSSS modulation platform, **MAC** addressing that "closes the door" to unregistered access, and a WEP 40-bit **wireless** packet **encryption** process

**33/3,K/10 (Item 3 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

04535536 Supplier Number: 58672802 (USE FORMAT 7 FOR FULLTEXT)

**WAVE WIRELESS LAUNCHES SPEEDLAN WIRELESS PRODUCTS. (Product Announcement)**

LAN Product News, v12, n2, pNA

Feb, 2000

Language: English Record Type: Fulltext

Article Type: Product Announcement

Document Type: Newsletter; Trade

Word Count: 634

... up to 25 miles, all Speedlan bridge/routers provide many features common to more expensive **wireless** bridges but at a much lower cost. Unlike many products on the market today, advanced **MAC** layer filtering, IP Routing, data **encryption** and SNMP management are all included as standard features.

Speedlan products are compatible with all...

?

41/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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08229390 Supplier Number: 68024926 (USE FORMAT 7 FOR FULLTEXT)  
**INTERSil INTROS ARM CHIPS FOR WIRELESS LAN. (Brief Article) (Product Announcement)**

Long, Mark  
Microprocessor Report, v14, n11, p34  
Nov, 2000  
Language: English Record Type: Fulltext  
Article Type: Brief Article; Product Announcement  
Document Type: Newsletter; Trade  
Word Count: 142

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...ISL3856, an 802.11am ARM9-core-based chip that has been optimized for use in **wireless** hubs and gateways. Intersil's ISL3856 **MAC** chip for 802.11b applications will also support mandatory data rates for 802.11a. In addition, the ISL3856 supports 128-bit **encryption** as well as 10- and 100Mb/s data rates through the chip's onboard Ethernet...

41/3,K/2 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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07905510 Supplier Number: 66097535 (USE FORMAT 7 FOR FULLTEXT)  
**Intersil Announces New PRISM ARM MAC Platforms For Wireless LAN Applications; Introduces new 'Access Point-on-a-chip' that reduces cost through higher integration.**

Business Wire, p2206  
Oct 16, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 1039

... 11a offerings, which will include complete chipsets, firmware, software, and radio reference designs.

This newest **MAC** chip is based on the popular ARM9 core and is optimized for use in Access Points, which are basically **wireless** hubs or gateways that give users a **wireless** link to the network and Internet. The new **MAC** can be used in 802.11b applications and will support mandatory data rates for 802...

...first "Access Point-on-a-chip," implementing both the 802.11 MAC protocol and the **MAC** bridging function. The ISL3856 includes an onboard Ethernet interface that supports both 10 and 100 Mbps data rates. It also supports 128-bit **encryption**, which offers the highest level of security for transmitted data.

Packaging, Availability and Pricing  
The...

41/3,K/3 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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07529505 Supplier Number: 63122663 (USE FORMAT 7 FOR FULLTEXT)



**3Com Introduces Industry's First Layer 3 Wireless LAN Security Solution.**

Business Wire, p0449

July 5, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 766

... LAN. The AirConnect solution currently features Wired Equivalent Privacy (WEP) -- a standards-based Layer 2 **encryption** technique that secures data transmitted between **wireless** access points and PCs -- as well as access control using **wireless** network card ( **MAC** layer) addresses. While WEP is adequate for smaller **wireless** installations, it is not sufficiently scaleable to meet the security needs of large corporate networks...

**41/3,K/4 (Item 4 from file: 16)**

DIALOG(R)File 16:Gale Group PROMT(R)

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06855890 Supplier Number: 58063231 (USE FORMAT 7 FOR FULLTEXT)

**Lesson 137: Wireless LANs (802.11b). (Technology Information) (Tutorial)**

Angel, Jonathan

Network, pNA

Dec 1, 1999

Language: English Record Type: Fulltext Abstract

Article Type: Tutorial

Document Type: Magazine/Journal; Trade

Word Count: 2023

... allows for 40-bit encryption; some vendors of 802.11b equipment offer optional 128-bit **encryption** or plan to make it available as a firmware upgrade. A few also sell **wireless** NICs that have been manufactured not only with a unique **MAC** address but also with a unique public/private key pair. Administrators can require that all...

...any mismatches. This way, an attacker can be prevented from breaking into a network via **MAC** address masquerading.

**CUTTING ACCESS COST**

While valuable for the infrastructure network, features such as multiple ESSIDs, roaming, and 128-bit **encryption** increase the cost of hardware APs to around \$1,000 each. Vendors such as Apple...

**41/3,K/9 (Item 1 from file: 47)**

DIALOG(R)File 47:Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

04422477 SUPPLIER NUMBER: 17894849 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Free to roam: wireless LANs. (includes related articles on highlights, Editors' Choice, wireless hardware, reading Suitability to Task ratings, infrared networks, benchmark tests) (overview of nine evaluations of wireless networks) (individual evaluation records searchable under "Free to Roam: Wireless LANs") (Hardware Review) (Evaluation)**

Boyle, Padraic R.

PC Magazine, v15, n4, p175(16)

Feb 20, 1996

DOCUMENT TYPE: Evaluation ISSN: 0888-8507

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4695 LINE COUNT: 00380

... Keep in mind, however, that most of the products have multiple security features, including data **encryption**, data scrambling, and user IDs.

The IEEE committee has included both FHSS and DSSS techniques in its draft of the 802.11 **wireless media access control (MAC)** and physical (PHY) specifications. Similar to other IEEE standards in place, the 802.11 specification should help bring down the pricing of **wireless LAN** products by replacing proprietary solutions with mass produced standard chip sets. Advanced Micro Devices recently introduced an 802.11 compatible **media access controller** chip called the PCnet-Mobile for **wireless LAN devices**. For those of you who can't wait for the standard to be completed, nearly...

41/3,K/11 (Item 3 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

04034512 SUPPLIER NUMBER: 14803045 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Wireless internetworking. (cellular digital packet data standard) (Network Edition: Lippis on Networking) (Column)**  
Lippis, Nick  
PC Magazine, v13, n1, pNE37(1)  
Jan 11, 1994  
DOCUMENT TYPE: Column ISSN: 0888-8507 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 819 LINE COUNT: 00061

... will use the SubNetwork Dependent Convergence Protocol or SNDCP and a data-link protocol called **Mobile Data Link Protocol (MDLP)**, which will give the user a direct connection to the router backbone. The MDLP uses **MAC** frames and sequence control to provide error detection and recovery, while the SNDCP provides segmentation, header compression, **encryption**, and authentication. The router network will provide key network attributes such as address resolution, roaming...

41/3,K/12 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

12368269 SUPPLIER NUMBER: 62928476 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Wireless LANs Explode With A Kaleidoscope Of Options. (News Briefs)**  
Mannion, Patrick  
Electronic Design, 48, 11, 71  
May 29, 2000  
ISSN: 0013-4872 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 5169 LINE COUNT: 00398

... Equivalent Privacy (WEP) protocol and power save. WEP refers to how the data frames are **encrypted** and offers a security option. To date, failures have been restricted to select pairs, with the problem residing in the **MAC**.

"Another issue," says Froning, "and one that's not defined in the standard, is the...  
?"

File 6:NTIS 1964-2004/Aug W3  
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File 2:INSPEC 1969-2004/Aug W2  
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File 8:Ei Compendex(R) 1970-2004/Aug W2  
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File 95:TEME-Technology & Management 1989-2004/Jun W1  
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File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Jul  
(c) 2004 The HW Wilson Co.

File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Aug 16  
(c) 2004 The Gale Group

File 144:Pascal 1973-2004/Aug W2  
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(c) 2002 The Gale Group

File 603:Newspaper Abstracts 1984-1988  
(c)2001 ProQuest Info&Learning

Set	Items	Description
S1	69649	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSPECIFIC) (1W)ACCESS??? ?(1W) (CONTROL??? ? OR CONTROLL??? ?)
S2	73661	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT?
S3	13852	DECRYPT? OR UNENCRYPT? OR UNENCIPHER? OR UNENCYIPHER? OR DECRYPT? OR DECRYPT? OR UNCRYPT? OR UNCRYPT? OR UNCRYPT?
S4	1470146	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	749929	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	194117	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK) ()PAD
S7	166308	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	4795	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	17070	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (-DIGITAL OR DATA) () (ASSISTANT? ? OR ORGANIZER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	128060	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR -MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W)- (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)

S11 10072 RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR -  
APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)

S12 3890 RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?

S13 8 PERSONAL()DISPLAY?() (DEVICE? OR UNIT?? OR APPARATUS? OR AP-  
P?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR  
COMPUTER? ?)

S14 1989314 SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR -  
WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCK-  
ET OR IR OR INFRARED

S15 97234 S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR  
UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANI?ER? OR TERMINAL?  
OR APPLIANCE?)

S16 4571 (VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR -  
PHONE? ? OR HANDSET? ? OR HAND()SET? ?)

S17 18461 PALMSIZE? OR PALMHeld OR HANDY? ? OR FLIPPHONE? OR VIDEOPH-  
ONE? OR PICTUREPHONE?

S18 653 S1 AND S2:S3

S19 6572 S1 AND S5

S20 96 S18 AND S19

S21 41 S18 AND (S6:S13 OR S15:S17)

S22 108 S20:S21

S23 80 S22/2001:2004

S24 28 S22 NOT S23

S25 21 RD (unique items)

25/7/1 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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2150814 NTIS Accession Number: PB2000-101445/XAB

**Examensarbete: Autenticering av Noder i Mobila Paketradionaet (Thesis:  
Authentication of Nodes in Packet Radio Networks)**

Johansson, L. G.

Foersvarets Forskningsanstalt, Linkoeeping (Sweden). Dept. of Command and  
Control Warfare Technology.

Corp. Source Codes: 091338005

Report No.: FOA-R-97-00497-503-SE

May 1997 114p

Languages: Swedish Document Type: Thesis

Journal Announcement: USGRDR0006

Text in Swedish; summary in English. See also PB97-174684.

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NTIS Prices: PC A07/MF A02

Country of Publication: Sweden

This master thesis covers the construction of a simulator for simulating  
authentication of nodes and packages in a **mobile** packet radio network.  
The network is dynamic and changes topology continuously which implies  
special demands. To accomplish a solution which includes the authentication  
on a low level, a new model of reference for communication has been  
developed. This model is based on the TCP/IP and includes an authentication  
layer below the network layer. The authentication layer authenticates nodes  
with a Diffie-Hellman algorithm working on an algebraic group, defined by  
an elliptic curve. IP-packages are authenticated by a **MAC** based on  
sessionkeys and plaintext hashed by the md5-funktion. Each md5-sum is  
truncated to 32 bits due to the limited bandwidth. The simulator was  
implemented using the Maisie language which is a public domain software  
developed by a research group from UCLA. An evaluation of Maisie is  
included in the thesis. The result of this work is a simulator environment

with focus on the authentication model.

25/7/2 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

7074958 INSPEC Abstract Number: B2001-12-6210L-095, C2001-12-5620L-018

**Title: Advanced prototype platform for a wireless multimedia local area network**

Author(s): Tikkanen, K.; Hannikainen, M.; Hamalainen, T.; Saarinen, J.

Author Affiliation: Dept. of Comput. Syst. Lab., Tampere Univ. of Technol., Finland

Conference Title: Signal Processing X Theories and Applications. Proceedings of EUSIPCO 2000: Tenth European Signal Processing Conference Part vol.4 p.2309-12 vol.4

Editor(s): Gabbouj, M.; Kuosmanen, P.

Publisher: Tampere Univ. Technology, Tampere, Finland

Publication Date: 2000 Country of Publication: Finland 4 vol. xvii+2556 pp.

ISBN: 952 15 0443 9 Material Identity Number: XX-2001-01663

Conference Title: Proceedings of 10th European Signal Processing Conference

Conference Date: 4-8 Sept. 2000 Conference Location: Tampere, Finland

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: This paper presents an advanced version of a configurable demonstrator platform developed for testing a new **wireless** local area network called TUTWLAN. TUTWLAN is targeted for limited service areas with stationary or **portable terminals**. Applications range from simple **wireless** sensors to multimedia **laptops**. The network supports the different quality of service (QoS) requirements of these applications. The improved development platform has been designed because of the restrictions discovered in the first prototype. The new platform provides a better testing environment for developing **medium access control (MAC)** protocols for TUTWLAN and for designing embedded stand-alone applications. Furthermore, various other designs can be tested, for example hardware implementations of **encryption** algorithms. Both the new and the old prototypes consist of a digital signal processor (DSP), external memory modules for the DSP, and a field programmable gate array (FPGA) circuit. The platform is connected to a radio module and can be attached to a host computer using peripheral component interconnect (PCI) bus. Compared to the original platform, the new prototype contains more memory, a faster and larger FPGA, and a higher bit-rate radio. (18 Refs)

Subfile: B C

Copyright 2001, IEE

25/7/3 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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6965067 INSPEC Abstract Number: B2001-08-6250B-004, C2001-08-5620W-025

**Title: Global standardization efforts of BWA systems based on cable modem**

Author(s): Arunachalam, A.

Author Affiliation: Nortel Networks, Richardson, TX, USA

Conference Title: 2000 IEEE Emerging Technologies Symposium on Broadband, Wireless Internet Access. Digest of Papers (Cat. No.00EX414) p.4 pp.

Editor(s): Winson, P.

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 2000 Country of Publication: USA 212 pp.  
ISBN: 0 7803 6364 7 Material Identity Number: XX-2001-00702  
Conference Title: 2000 IEEE Emerging Technologies Symposium on Broadband,  
Wireless Internet Access. Digest of Papers  
Conference Sponsor: IEEE  
Conference Date: 10-11 April 2000 Conference Location: Richardson, TX,  
USA

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

Abstract: Data-over-Cable Service Interface Specifications (DOCSIS) developed by Cable Labs has been adopted by the International Telecommunication Union (ITU) as a draft Recommendation in ITU-T and ITU-R. Nortel Networks has been spearheading the BWA standards efforts in ITU-R, ITU-T and in IEEE 802.16, that uses the cable modem specifications as a basis for **wireless** access systems in order to achieve economies of scale. The cable modem technical parameters for physical and **media access control** layers have been adapted to the **wireless** environment to support a bidirectional **wireless** access system for interactive services. This paper presents the BWA (broadband **wireless** access) physical and **media access control (MAC)** standardization efforts that are in progress in IEEE 802.16 in the 10-40 GHz band, with a focus on the LMDS (local multipoint distribution service) band in the U.S. Nortel Networks is leading the effort to standardize the DOCSIS based parameters for PHY/ **MAC** standardization in IEEE 802.16. The services that will be supported by BWA systems include fast Internet access (supporting both IP and ATM traffic), video and interactive television. The key features of this BWA system are multiple quality of service (QoS) support, dynamic service management, support of real-time services along with **cryptographic** authentication of the users for protection against theft of service. (7 Refs)

Subfile: B C

Copyright 2001, IEE

1 25/7/4 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6282112 INSPEC Abstract Number: B1999-08-6210L-035, C1999-08-5620L-014

Title: **Security design for a new wireless local area network TUTWLAN**

Author(s): Salli, K.-T.; Hamalainen, T.; Knuutila, J.; Saarinen, J.

Author Affiliation: Signal Process. Lab., Tampere Univ. of Technol., Finland

Conference Title: Ninth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (Cat. No.98TH8361) Part vol.3 p. 1540-4 vol.3

Publisher: IEEE, New York, NY, USA

Publication Date: 1998 Country of Publication: USA 3 vol. 1574 pp.

ISBN: 0 7803 4872 9 Material Identity Number: XX-1998-03095

U.S. Copyright Clearance Center Code: 0 7803 4872 9/98/\$10.00

Conference Title: Proceedings of Ninth International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'98)

Conference Sponsor: Worcester Polytech. Inst.; Nokia; Bell Atlantic Mobile; CWINS; Analog Devices; IEEE; IEEE Commun. Soc.; IEE; IEICE; GTE Lab

Conference Date: 8-11 Sept. 1998 Conference Location: Boston, MA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); New Developments (N); Practical (P)

Abstract: This paper presents a security scheme for a **medium access control** protocol in a new **wireless** local area network TUTWLAN (Tampere University of Technology WLAN). The design objective has been to develop a security scheme that will be scalable for various needs and offer high

security for demanding applications. The designed security scheme provides both privacy of **wireless** data communications and the authenticity of communicating parties. Our authentication scheme allows also the communicating entities to establish a shared secret key for secure communication session. Data security schemes have also been introduced. There are three optional data security modes that offer flexible ciphering and data security level. (7 Refs)

Subfile: B C

Copyright 1999, IEE

25/7/11 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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06788706 Genuine Article#: BL01D Number of References: 3

**Title: Reinventing the travois: Encryption / MAC in 30 ROM bytes**

Author(s): Yuval G (REPRINT)

Corporate Source: MICROSOFT CORP, RES/REDMOND//WA/98052 (REPRINT)

, 1997, V1267, P205-209

ISSN: 0302-9743 Publication date: 19970000

Publisher: SPRINGER-VERLAG BERLIN, HEIDELBERGER PLATZ 3, W-1000 BERLIN 33,

GERMANYLECTURE NOTES IN COMPUTER SCIENCE

Series: LECTURE NOTES IN COMPUTER SCIENCE

Language: English Document Type: ARTICLE

Abstract: Some people in the software industry are looking into home-control systems, much preferably without stringing new wires. This raises a simple issue: I have no more access to my power-lines than a thief has; and ditto (even more so) for **wireless**.

Therefore, if we want the same security we now have by owning the wire, we need some kind of cryptologic authentication.

The CPUs considered for this are quite underpowered (by today's standards): 8051 or similar[1], 1KB flash EPROM, 64 bytes RAM, 128 bytes EEPROM, and a peak 1MHz instruction rate; that last figure is relatively very fast, since the wire is 10KBPS or less.

In the classic study of access-control weaknesses, Ali Baba could replay the "open" message, using the authenticator "simsim" (or "sesame"); since replay attacks were not blocked, it did not matter how strong the 40 thieves' **crypto** & authentication was on other fronts. We therefore have to use EEPROM to keep track of a serial number, and get rid of replayed ones.

To add to the problem, messages (including the authenticator) had better be kept down to 8 bytes or so, to give them some decent chance to get through all the line noise, with the wimpy power-supplies planned.

25/7/12 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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04539820 JICST ACCESSION NUMBER: 00A0088567 FILE SEGMENT: JICST-E

**A Protection Method against Unauthorized Access and/or Address Spoofing for Open Network Access Systems.**

ISHIBASHI HAYATO (1); ABE KOTA (1); ONISHI KATSUMI (1); MATSUURA TOSHIO (1); YAMAI NARIYOSHI (2)

(1) Osaka City Univ.; (2) Okayama Univ.Compit. Center

Joho Shori Gakkai Ronbunshi(Transactions of Information Processing Society of Japan), 1999, VOL.40,NO.12, PAGE.4353-4361, FIG.4, TBL.2, REF.12  
JOURNAL NUMBER: Z0778AAZ ISSN NO: 0387-5806  
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654 681.3.02-759  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: Personal computers are getting much smaller and easier to carry about in these days. LAN sockets providing network accessibility for those **mobile computers** are often set in public places like libraries, computer centers, and so on. However, it is difficult to prevent illegal access to networks in such cases. In this paper, we propose a protection method to cope with illegal access. Our method provides the following functions: (1) only valid users can access to the network, (2) preventing malicious users from invalid use of the network by IP and/or **MAC** address spoofing, and (3) no need for pre-registration of IP and/or **MAC** addresses. We have implemented this method as a system named LANA. The design and implementation of LANA are also discussed. (author abst.)

25/7/13 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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04379243 JICST ACCESSION NUMBER: 99A0802665 FILE SEGMENT: JICST-E  
MAC Layer Configurations.

IIZUKA MASATAKA (1); INOUE YASUHIKO (1); ICHIKAWA TAKEO (1); KUNO YUTAKA (1)

(1) Ntt Akusesusabisushisutemuken

NTT R D, 1999, VOL.48,NO.8, PAGE.601-607, FIG.9, REF.7

JOURNAL NUMBER: F0137ACY ISSN NO: 0915-2326

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: Configurations and functions of the **MAC** layer for the Ethernet-based **wireless** access system for the 5-GHz-band are introduced. The **wireless** interface between a terminal and an access point in this system is based on the IEEE 802.11 standard which employs the CSMA/CA scheme as the access protocol. CSMA/CA offers a synchronous service with a polling procedure in addition to the contention-based asynchronous service. Furthermore, the various functions, such as association, handoff, and authentication, are provided through the **MAC** management entity. This paper overviews the **MAC** layer, protocols, control schemes and their characteristics. (author abst.)

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File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)

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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453

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Set	Items	Description
S1	4110	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSP- ECIFIC) (1W)ACCESS??? ?(1W) (CONTROL??? ? OR CONTROLL??? ?)
S2	21446	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENC- IPHER? OR ENCRYPT? OR ENCRYPT?
S3	8453	DECRYPT? OR UNENCRYPT? OR UNENCIPHER? OR UNENCYIPHER? OR DE- CIPHER? OR DECRYPT? OR UNCRYPT? OR UNCRYPT? OR UNCRYPT?
S4	665289	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	312562	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	200250	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK) ()PAD
S7	39572	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	8805	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	19301	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (- DIGITAL OR DATA) () (ASSISTANT? ? OR ORGANI?ER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	92343	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR - MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W)- (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S11	17378	RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR - APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)
S12	3352	RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?
S13	18	PERSONAL()DISPLAY?() (DEVICE? OR UNIT?? OR APPARATUS? OR AP- P?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR COMPUTER? ?)
S14	640824	SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR - WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCK- ET OR IR OR INFRARED
S15	148783	S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANI?ER? OR TERMINAL? OR APPLIANCE?)
S16	7431	(VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR - PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S17	8530	PALMSIZE? OR PALMHOLD OR HANDY? ? OR FLIPPHONE? OR VIDEOPH- ONE? OR PICTUREPHONE?
S18	124	S1 AND S2:S3
S19	679	S1 AND S5
S20	22	S18 AND S19
S21	15	S18 AND (S6:S13 OR S15:S17)
S22	26	S20:S21
S23	26	IDPAT (sorted in duplicate/non-duplicate order)
S24	26	IDPAT (primary/non-duplicate records only)
S25	23	S24 NOT MESSAG?(1W)AUTHENTIC?(1W)CODE? ?
S26	52274	IC='H04L-012/28':IC='H04L-012/288'
S27	18531	MC='W01-A06B5A'
S28	8309	IC='H04K-001'
S29	33673	IC='H04L-009'
S30	7885	MC='T01-D01'
S31	9115	MC='T01-J12C'
S32	13258	MC='W01-A05':MC='W01-A05A'
S33	12904	MC='T01-M06A1A'
S34	7372	MC='W01-A06C4'
S35	767	S1 AND (S33:S34 OR S5:S13 OR S15:S17)

S36	58	S35 AND (S2:S3 OR S28:S32)
S37	23	S36 AND S26:S27
S38	10	S37 NOT (S24 OR MESSAG?(1W)AUTHENTIC?(1W)CODE? ?)
S39	10	IDPAT (sorted in duplicate/non-duplicate order)
S40	10	IDPAT (primary/non-duplicate records only)

? t40/9/all

40/9/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016010951 \*\*Image available\*\*

WPI Acc No: 2004-168802/200416

XRPX Acc No: N04-134743

Mobile ad-hoc network for intrusion detection system, has policing node to detect intrusions based upon integrity check values, which do not correspond with respective data packets

Patent Assignee: HARRIS CORP (HARO )

Inventor: BILLHARTZ T J

Number of Countries: 100 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040028016	A1	20040212	US 2002217017	A	20020812	200416 B
WO 200415541	A2	20040219	WO 2003US25066	A	20030811	200416

Priority Applications (No Type Date): US 2002217017 A 20020812

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 20040028016	A1		22	H04Q-007/24	
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WO 200415541	A2	E		G06F-000/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20040028016 A1

NOVELTY - The network (10) has a policing node (13) to detect intrusions into **mobile** ad-hoc network (MANET). Transmissions among nodes (11, 12) are monitored to detect transmissions during an unauthorized period. An intrusion alert is generated based upon detected transmissions during the unauthorized period. The policing node detects intrusions based upon integrity check values, which do not correspond with respective data packets.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an intrusion detection method for a MANET.

USE - Used as intrusion detection system for those that focus on intrusion in the upper OSI network layer.

ADVANTAGE - The network detects network intrusion even when a rogue node has an authorized network or **media access control** identification ( **MAC** ID).

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic block diagram of a MANET.

MANET (10)  
Nodes (11,12)  
Policing node (13)  
Rogue node (14)  
pp; 22 DwgNo 1/21

Title Terms: **MOBILE** ; NETWORK; INTRUDE; DETECT; SYSTEM; NODE; DETECT; BASED; INTEGRITY; CHECK; VALUE; CORRESPOND; RESPECTIVE; DATA; PACKET

Derwent Class: T01; W01

International Patent Class (Main): G06F-000/00; H04Q-007/24

International Patent Class (Additional): H04L-012/28  
File Segment: EPI  
Manual Codes (EPI/S-X): T01-H01C2; T01-J12C ; T01-N02B1; W01-A01A;  
W01-A03B; W01-A05B; W01-A06G2; W01-B05A

40/9/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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015916086 \*\*Image available\*\*  
WPI Acc No: 2004-073926/200408  
XRPX Acc No: N04-059593

User's anonymity guaranteeing method in wireless local area network,  
involves randomly selecting temporary address as source address or  
destination address from temporary address set

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU ); JANG K (JANG-I); LEE  
I (LEEI-I); PARK J (PARK-I)

Inventor: JANG K; LEE I; PARK J; JANG G H; LEE I S; PARK J A

Number of Countries: 035 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1379029	A1	20040107	EP 2003254269	A	20030704	200408 B
US 20040006642	A1	20040108	US 2003613023	A	20030707	200408
JP 2004040806	A	20040205	JP 2003271436	A	20030707	200411
KR 2004004925	A	20040116	KR 200239155	A	20020706	200434
CN 1489339	A	20040414	CN 2003155034	A	20030706	200442

Priority Applications (No Type Date): KR 200239155 A 20020706

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1379029 A1 E 14 H04L-012/28

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB

GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

US 20040006642 A1 G06F-015/16

JP 2004040806 A 11 H04L-012/28

KR 2004004925 A H04L-012/22

CN 1489339 A H04L-012/28

Abstract (Basic): EP 1379029 A1

NOVELTY - The temporary address sets are created in **wireless**  
access node such that each set corresponds to unique **media access**  
**control ( MAC )** address of a **wireless terminal** , and transmitted to  
corresponding **wireless terminal** . A data packet transmission is  
performed between the **wireless terminal** and the **wireless access**  
node by randomly selecting a temporary address from the address set as  
a source or destination address.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

(1) a computer readable medium storing program for performing  
method of guaranteeing user's anonymity; and

(2) a **wireless** local area network system.

USE - For guaranteeing user's anonymity in **wireless** local area  
network.

ADVANTAGE - The outflow of private information is prevented and the  
risk of attack by malicious user's is reduced, by using the temporary  
address which is randomly selected from the temporary address set.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart describing  
a method of guaranteeing user's anonymity in a **wireless** LAN system.

pp; 14 DwgNo 2/5

Title Terms: USER; GUARANTEE; METHOD; **WIRELESS** ; LOCAL; AREA; NETWORK;  
RANDOM; SELECT; TEMPORARY; ADDRESS; SOURCE; ADDRESS; DESTINATION; ADDRESS  
; TEMPORARY; ADDRESS; SET  
Derwent Class: T01; W01  
International Patent Class (Main): G06F-015/16; H04L-012/22; **H04L-012/28**  
International Patent Class (Additional): G06F-015/177; **H04L-009/00** ;  
H04L-012/24  
File Segment: EPI  
Manual Codes (EPI/S-X): T01-C03C; T01-N02A3B; T01-S03; W01-A03B;  
**W01-A06B5A** ; **W01-A06C4** ; W01-A06E1; W01-A06G2

40/9/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015838102 \*\*Image available\*\*  
WPI Acc No: 2003-900306/200382  
XRPX Acc No: N03-718703

**Security control/attack detection method for wireless local area network used in hospital, involves accepting or denying service request from user based on verification of Internet protocol address of wireless station**

Patent Assignee: WU C (WUCC-I)  
Inventor: WU C  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
US 20030200455 A1 20031023 US 2002126077 A 20020418 200382 B

Priority Applications (No Type Date): US 2002126077 A 20020418  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 20030200455 A1 9 H04L-009/00

Abstract (Basic): US 20030200455 A1

NOVELTY - A communication is established between a **wireless** station and a base station by a network management console (NMC), and Internet protocol (IP) address is provided to the **wireless** station. The IP address of all **wireless** station is received and compared with **media access control (MAC)** address by the NMC, such that the IP address of specified **wireless** station is determined. The computer name of the **wireless** station is checked with the legal name list by NMC, based on which the service request from the **wireless** station is accepted/denied.

USE - For providing security control and detecting attack in **wireless** local area network (LAN) connected to **laptop** computer, **pocket computer** and **notebook** computer provided in hospital, coffee shop, restaurant, airport, also acts as identity authentication for Radius server.

ADVANTAGE - Provides user authentication effectively, thereby preventing service request from illegal user.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the process of security control and attack detection in **wireless** local area network.

pp; 9 DwgNo 4/4

Technology Focus:

TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The **wireless** station confirms to IEEE 802.11 standards.

Title Terms: SECURE; CONTROL; ATTACK; DETECT; METHOD; **WIRELESS** ; LOCAL;

AREA; NETWORK; HOSPITAL; ACCEPT; SERVICE; REQUEST; USER; BASED;  
VERIFICATION; PROTOCOL; ADDRESS; **WIRELESS** ; STATION  
Derwent Class: T01; W01  
International Patent Class (Main): **H04L-009/00**  
File Segment: EPI  
Manual Codes (EPI/S-X): T01-N02A2A; T01-N02B1B; W01-A05B; **W01-A06B5A** ;  
**W01-A06C4** ; W01-A06E; W01-A06F2A

**40/9/4** (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015794085 \*\*Image available\*\*  
WPI Acc No: 2003-856288/200380  
XRPX Acc No: N03-683955

Wireless terminal address information checking method in local area  
network, involves comparing Internet protocol address in relayed data  
packets with IP address associated with media access controller  
address of terminal

Patent Assignee: NOKIA CORP (OYNO )  
Inventor: BUSH A; HAVERINEN H; RINNEA J; SMITH M; TAKAMAKI T; TUOMI J;  
TUOMINEN H; TAKAMAEKI T  
Number of Countries: 102 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2388498	A	20031112	GB 200210267	A	20020507	200380 B
WO 200396719	A1	20031120	WO 2003FI348	A	20030505	200403
AU 2003229811	A1	20031111	AU 2003229811	A	20030505	200442
US 20040148374	A1	20040729	US 2003427307	A	20030501	200450

Priority Applications (No Type Date): GB 200210267 A 20020507

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2388498	A	28	H04L-012/28	
WO 200396719	A1	E	H04Q-007/22	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU  
ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

AU 2003229811 A1 H04Q-007/22 Based on patent WO 200396719  
US 20040148374 A1 G06F-015/173

Abstract (Basic): GB 2388498 A

NOVELTY - The identification information such as **media access controller** ( **MAC** ) address of **wireless terminal** , is received after establishment of communication connection between the terminal and access point. The Internet protocol (IP) address of terminal is associated with **MAC** address. The data packets having IP address transceived between terminal and network, is compared with associated **MAC** address, to accept or discard packets.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) access point for setting communication connection;
- (2) computer program product for access point.

USE - For ensuring address information of **wireless terminal**

such as **portable computer** in communication network such as **wireless** local area network (LAN).

ADVANTAGE - Authenticity and integrity of accounting are enhanced, and checking confirmation of IP address is easily enhanced.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining the **wireless terminal** address checking process.

pp; 28 DwgNo 1/3

Technology Focus:

TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The **wireless** conforms to IEEE 802.1 standard.

Title Terms: **WIRELESS** ; TERMINAL; ADDRESS; INFORMATION; CHECK; METHOD; LOCAL; AREA; NETWORK; COMPARE; PROTOCOL; ADDRESS; RELAY; DATA; PACKET; IP ; ADDRESS; ASSOCIATE; MEDIUM; ACCESS; CONTROL; ADDRESS; TERMINAL

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/173; **H04L-012/28** ; H04Q-007/22

International Patent Class (Additional): **H04L-009/32** ; H04L-012/26; H04L-012/56

File Segment: EPI

Manual Codes (EPI/S-X): T01-C03C; T01-N02B1B; T01-S03; W01-A03B; W01-A06C4X ; W01-A06E1; W01-A06G2

**40/9/5 (Item 5 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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015734821 \*\*Image available\*\*

WPI Acc No: 2003-797021/200375

XRPX Acc No: N03-639373

**Client authentication apparatus in internet, stores internet protocol address and media access controller address of registered client and corresponding router in managed table**

Patent Assignee: HITACHI SHONAN DENSHI KK (HITA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003303174	A	20031024	JP 2002105166	A	20020408	200375 B

Priority Applications (No Type Date): JP 2002105166 A 20020408

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003303174	A		5 G06F-015/00	

Abstract (Basic): JP 2003303174 A

NOVELTY - A managed table stores **media access control (MAC)** address of the router (20) and relationship between internet protocol (IP) address and **MAC** address of registered client terminals (10). The authentication apparatus checks the **MAC** address and the IP address of the authentication requirement client and the corresponding router with the registered information to authenticate the client for network connection.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for terminal authentication method.

USE - For providing authentication to client terminals like **personal digital assistant (PDA)**, domestic appliance, audio/video apparatus, electronic office equipment like computer and printer to distribute musical, video information through internet, intranet.

ADVANTAGE - Prevents the network access of users other than the registered clients.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer network. (Drawing includes non-English language text).  
client terminal (10)  
router (20)  
information server (31)  
management server (32)  
network (80)  
pp; 5 DwgNo 1/3

Title Terms: CLIENT; AUTHENTICITY; APPARATUS; STORAGE; PROTOCOL; ADDRESS; MEDIUM; ACCESS; CONTROL; ADDRESS; REGISTER; CLIENT; CORRESPOND; ROUTER; TABLE

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/00

International Patent Class (Additional): H04L-009/32 ; H04L-012/28

File Segment: EPI

Manual Codes (EPI/S-X): T01-J; W01-A05B; W01-A06

40/9/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015687496 \*\*Image available\*\*

WPI Acc No: 2003-749685/200371

XRPX Acc No: N03-600920

Access control method in wireless local area network, involves allowing user terminals to access wireless network, only if both user terminal authentication and user password authentication are approved

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU ); LEE K (LEEK-I)

Inventor: LEE K; LEE G H

Number of Countries: 035 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1345386	A2	20030917	EP 2003250931	A	20030214	200371 B
JP 2003289301	A	20031010	JP 200335865	A	20030214	200375
CN 1445963	A	20031001	CN 2003104447	A	20030214	200382
US 20030177350	A1	20030918	US 2003383729	A	20030310	200382
KR 2003075224	A	20030926	KR 200214276	A	20020316	200409

Priority Applications (No Type Date): KR 200214276 A 20020316

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1345386	A2	E	10	H04L-029/06	

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

JP 2003289301 A 8 H04L-009/32

CN 1445963 A H04L-012/28

US 20030177350 A1 H04L-009/00

KR 2003075224 A H04L-009/32

Abstract (Basic): EP 1345386 A2

NOVELTY - The user terminals (100a,100b) requiring access to wireless network, are authenticated at respective access points (120a,120b), using media access control identifier (MAC - ID). A user password received from each user terminal is authenticated by an authentication server (140). The user terminals are allowed to access the network only if both terminal and password authentications are approved.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) password authentication client operation method;



(2) password authentication server operation method;  
(3) authentication client; and  
(4) computer readable recorded **medium** storing **access control** program.

USE - For controlling user access to **wireless** local area networks (WLANS).

ADVANTAGE - Since network access is allowed only after approval of both terminal and password authentications, improved security is ensured.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic view illustrating the network access control process.

**MAC** protocol stacks (10a,10b)

user terminals (110a,100b)

access points (120a,120b)

authentication server (140)

portal (150)

pp; 10 DwgNo 1/2

Technology Focus:

TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The **wireless** local area network operates according to IEEE802.11 standards.

Title Terms: ACCESS; CONTROL; METHOD; **WIRELESS** ; LOCAL; AREA; NETWORK;

ALLOW; USER; TERMINAL; ACCESS; **WIRELESS** ; NETWORK; USER; TERMINAL;

AUTHENTICITY; USER; PASSWORD; AUTHENTICITY; APPROVE

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00 ; H04L-009/32 ;

H04L-012/28 ; H04L-029/06

International Patent Class (Additional): G06F-015/00; H04L-009/08 ;

H04L-012/22; H04L-012/24

File Segment: EPI

Manual Codes (EPI/S-X): T01-N02B1B; T01-S03; W01-A05B; W01-A06B5A ;

W01-A06E1A; W01-A07G

40/9/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015448877 \*\*Image available\*\*

WPI Acc No: 2003-511019/200348

**Id certification method for certification offer and system thereof**

Patent Assignee: IP ONE INC (IPON-N)

Inventor: SO J U

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2003018219	A	20030306	KR 200151823	A	20010827	200348 B

Priority Applications (No Type Date): KR 200151823 A 20010827

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 2003018219	A	1	H04L-009/32	

Abstract (Basic): KR 2003018219 A

NOVELTY - An ID certification method for certification offer and system thereof is provided, which copes with a security easily and stably although the security is violated or a new user exists.

DETAILED DESCRIPTION - An access point receives a certification packet generated by a terminal(S1100). The access point checks the received certification packet(S1200). If the certification packet is a login packet, an **MAC** address is extracted from the login packet and a

process that the extracted address is registered at a memory of the access point is determined(S1310). If registration succeed, the access point transfers an ACK packet to the terminal(S1316). If the certification packet is a logoff packet, there is judged whether an **MAC** address of the logoff packet is registered at a memory of the access point(S1410). If not, the access point transfers an NAK packet to the terminal(S1415). If so, the access point deletes an **MAC** address of the terminal and transfers the ACK packet to the terminal(S1411). If the certification packet is neither the login packet nor the logoff packet, an **MAC** address of a general packet is extracted and there is judged whether an extracted address is registered at a memory of the access point(S1510). If not, the general packet is discarded(S1516). If so, a **wireless** LAN service is provided(S1511).

pp; 1 DwgNo 1/10

Title Terms: ID; CERTIFY; METHOD; CERTIFY; OFFER; SYSTEM

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/32

File Segment: EPI

Manual Codes (EPI/S-X): T01-N02B1B; W01-A03B; W01-A05B; W01-A06B5A ;  
W01-A06G2

40/9/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015250784 \*\*Image available\*\*

WPI Acc No: 2003-311710/200330

XRPX Acc No: N03-248168

**Authentication in wireless LAN system, involves checking presence of MAC address of access point communicating with mobile station, for making public key authentication/re-authentication request to access points**

Patent Assignee: NEC CORP (NIDE )

Inventor: SHIMIZU M

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020196764	A1	20021226	US 2002177019	A	20020624	200330 B
JP 2003005641	A	20030108	JP 2001191559	A	20010625	200330

Priority Applications (No Type Date): JP 2001191559 A 20010625

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 20020196764	A1	19	H04Q-007/24	
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JP 2003005641	A	13	G09C-001/00	
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Abstract (Basic): US 20020196764 A1

NOVELTY - **Mobile** stations (2-1 - 2-k) retrieve an access point (AP) (1) data management table held in it to check whether the **MAC** address of an AP which the station intends to make communication with, is present in the table. When the **MAC** address is not present in the table, the **mobile** station makes a public key authentication request to the AP, and if not makes a public key re-authentication request to the AP.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for authentication system.

USE - For performing authentication in **wireless** LAN system.

ADVANTAGE - Since the **mobile** station makes a public key re-authentication request to an access point when **MAC** address of the

access point communicating with the station is not present in the data management table, the illegal re-authentication request is prevented thereby preventing unfair communication by illegal **mobile** station. Hence the authentication procedure is simplified.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the authentication system in **wireless** LAN system.

access point (1)

**mobile** stations (2-1 - 2-k)

pp; 19 DwgNo 1/11

Title Terms: AUTHENTICITY; **WIRELESS** ; LAN; SYSTEM; CHECK; PRESENCE; **MAC** ; ADDRESS; ACCESS; POINT; COMMUNICATE; **MOBILE** ; STATION; PUBLIC; KEY; AUTHENTICITY; AUTHENTICITY; REQUEST; ACCESS; POINT

Derwent Class: P85; T01; W01

International Patent Class (Main): G09C-001/00; H04Q-007/24

International Patent Class (Additional): **H04L-009/08** ; **H04L-012/28**

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): T01-C03C; **T01-D01** ; T01-N02B1; W01-A03B; W01-A05B; W01-A06C4X; W01-A06E1; W01-A06G2

40/9/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014497261 \*\*Image available\*\*

WPI Acc No: 2002-317964/200236

XRPX Acc No: N02-248972

User protocol for wireless local area network system, has primary LAN being connected to secondary LAN using user intervention by enabling

V-AAA of secondary LAN to communicate with H-AAA of primary LAN

Patent Assignee: ROKE MANOR RES LTD (ROKE-N)

Inventor: GALLAGHER M; HANCOCK R

Number of Countries: 027 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2366948	A	20020320	GB 200022604	A	20000915	200236 B
US 20020034298	A1	20020321	US 2001953369	A	20010917	200236
EP 1199843	A2	20020424	EP 2001203097	A	20010803	200242
GB 2366948	B	20040121	GB 200022604	A	20000915	200413

Priority Applications (No Type Date): GB 200022604 A 20000915

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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GB 2366948	A		11	H04L-012/28	
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US 20020034298	A1			H04L-009/32	
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EP 1199843	A2 E		5	H04L-012/28	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

GB 2366948	B			H04L-012/28	
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Abstract (Basic): GB 2366948 A

NOVELTY - The subscribers (11,12) of the primary local area network (LAN) (1), communicate with operator of secondary LAN (4) regarding getting connected with each other using user intervention by enabling the visitor-authentication and authorization and accounting (V-AAA) server (6) of secondary LAN to communicate with Home-AAA server (2) of primary LAN. This linkage remains until the subscribers remain authorized by the operator.

USE - User protocol for W-LAN systems.

ADVANTAGE - The operator of the existing LAN can add new LAN sites

or new partner operators without modifying the externally and internally established relationships. The extent to which **wireless** LAN subscribers can roam, is regulated.

DESCRIPTION OF DRAWING(S) - The figures show the schematic diagram of the LAN.

Primary LAN (1)  
H-AAA server (2)  
Secondary LAN (4)  
V-AAA server (6)  
Subscribers (11,12)  
pp; 11 DwgNo 1a, 1b/1

Technology Focus:

TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The **MAC** addresses or other identifiers are stored by different W-LAN technologies such as IEEE 802.11 and Bluetooth.

Title Terms: USER; PROTOCOL; **WIRELESS** ; LOCAL; AREA; NETWORK; SYSTEM; PRIMARY; LAN; CONNECT; SECONDARY; LAN; USER; INTERVENING; ENABLE; SECONDARY; LAN; COMMUNICATE; PRIMARY; LAN

Derwent Class: W01

International Patent Class (Main): H04L-009/32 ; H04L-012/28

International Patent Class (Additional): H04M-001/66

File Segment: EPI

Manual Codes (EPI/S-X): W01-A06B5A ; W01-A06C4 ; W01-A06C4A; W01-A06E1; W01-A06F5; W01-A06G3

40/9/10 (Item 10 from file: 347)

DIALOG(R)File 347:JAPIO

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07256493 \*\*Image available\*\*

APPROVAL METHOD AND SYSTEM OF **WIRELESS** TERMINAL IN **WIRELESS** NETWORK

PUB. NO.: 2002-124952 [JP 2002124952 A]

PUBLISHED: April 26, 2002 (20020426)

INVENTOR(s): FUKUTOMI MASASHI

OTA MASATAKA

APPLICANT(s): FURUKAWA ELECTRIC CO LTD:THE

APPL. NO.: 2000-312626 [JP 2000312626]

FILED: October 12, 2000 (20001012)

INTL CLASS: H04L-012/28 ; H04Q-007/38; H04L-009/08 ; H04L-009/32 ; H04L-012/56

#### ABSTRACT

PROBLEM TO BE SOLVED: To avoid illegal access by an illegal user and illegal use of a network resource without changing a packet format.

SOLUTION: A **wireless terminal** (2-6) transmits a request first. A base station 1 relays the request, takes out the **MAC** address of the transmission origin and transmits a packet for the approval of the terminal to an approval server 7. When the approval server 7 receives the **MAC** address, it transmits an encoded session key. Then, the base station 1 keeps the session key and transmits the packet of the response with the session key. The **wireless terminal** (2-6) keeps the session key and, hereinafter, calculates a CRC value according to a HASH value obtained by adding the session key to the header and payload of the **MAC**, and transmits the packet. When the base station 1 receives the packet, it compares the calculated CRC value according to the HASH value with the CRC value of the packet, and realizes approval for each packet.

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? t25/9/1,7-18,23

25/9/1 (Item 1 from file: 347)

DIALOG(R) File 347:JAPIO

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07991741 \*\*Image available\*\*

COMMUNICATION METHOD, BRIDGE DEVICE, AND TERMINAL DEVICE

PUB. NO.: 2004-104500 [JP 2004104500 A]

PUBLISHED: April 02, 2004 (20040402)

INVENTOR(s): SHIBUYA NAOHISA

TAKI DAISUKE

GOTO MASATAKA

TAKAGI MASAHIRO

APPLICANT(s): TOSHIBA CORP

APPL. NO.: 2002-264216 [JP 2002264216]

FILED: September 10, 2002 (20020910)

INTL CLASS: H04L-012/46; H04L-012/28

#### ABSTRACT

PROBLEM TO BE SOLVED: To make performable transmission between terminals through a bridge device for conducting a predetermined processing such as a new **encryption** function different from **encryption** functionality provided in a **wireless** LAN (Local Area Network).

SOLUTION: In a network where at least one of terminals 200 and 210 existing in a **wireless** LAN communicates through a first **MAC** ( **Media Access Control** ) bridge 310 of a **wireless** LAN base station, a second additional **MAC** bridge 100 for conducting a predetermined processing is connected to a wired LAN side of the first **MAC** bridge 310. The terminals 200 and 210 and the second bridge 100 transmit and receive each other by tunneling a frame encapsulated with attachment of a header in which a **MAC** frame is made as a destination mutually.

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25/9/7 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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016348188 \*\*Image available\*\*

WPI Acc No: 2004-506283/200448

XRPX Acc No: N04-399974

Interrupt level adjustment method in host system, involves adjusting interrupt moderation level of interrupt generating agent based on result of comparison of current system interrupt rate and threshold interrupt rate

Patent Assignee: INTEL CORP (ITLC )

Inventor: CHIU C Y; CONNOR P L; DURHAM D M; GOVINDARAJAN P; GUMANOW G D;

JACOBS J P; MANN E K; TRAN H T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040123008	A1	20040624	US 2002326740	A	20021220	200448 B

Priority Applications (No Type Date): US 2002326740 A 20021220

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 20040123008 A1 12 G06F-013/24

Abstract (Basic): US 20040123008 A1

NOVELTY - The current system interrupt rate at a host system is determined by adding the interrupt rates from interrupt generating agents. The determined rate is compared with a threshold interrupt rate associated with the system. The interrupt moderation level at the agent is adjusted based on the comparison result.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) interrupt level adjusting system;
- (2) host system; and
- (3) article of manufacture for adjusting interrupt level.

USE - For adjusting level of interrupt generated by interrupt generating agents e.g. input/output (I/O) controller such as gigabit ethernet media access controller (MAC), timer, codec, cryptographic device, keyboard, mouse, disk controller, serial and parallel ports to printer, scanner, network controller, modem, network interface card (NIC), small computer system interface (SCSI) controller and display device, for indicating arrival of packet in host system (claimed) such as personal computer, workstation, main frame computer, server, hand-held computer, palmtop computer, laptop computer, network switch, router, telephony device, network appliance and wireless device.

ADVANTAGE - The interrupt rate obtained from the interrupt generating agents of the host system is controlled by adjusting interrupt moderation level of the agents. Hence throughput and performance of host system is increased and interrupts are not delayed when additional moderation is unnecessary.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram explaining the interrupt level adjustment method.

pp; 12 DwgNo 3/4

Title Terms: INTERRUPT; LEVEL; ADJUST; METHOD; HOST; SYSTEM; ADJUST; INTERRUPT; MODERATE; LEVEL; INTERRUPT; GENERATE; AGENT; BASED; RESULT; COMPARE; CURRENT; SYSTEM; INTERRUPT; RATE; THRESHOLD; INTERRUPT; RATE

Derwent Class: T01

International Patent Class (Main): G06F-013/24

File Segment: EPI

Manual Codes (EPI/S-X): T01-H05B2; T01-S03

25/9/8 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016262064 \*\*Image available\*\*

WPI Acc No: 2004-419958/200439

XRPX Acc No: N04-333380

**Data packet transmission method for communication system, involves transmitting predetermined number of data packets of same connection less than or equal to maximum number of data packets**

Patent Assignee: PHILIPS INTELLECTUAL PROPERTY GMBH (PHIG ); KONINK PHILIPS ELECTRONICS NV (PHIG )

Inventor: HERRMANN C; NICKEL P

Number of Countries: 107 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200443018	A1	20040521	WO 2003IB4987	A	20031107	200439 B
DE 1020252535	A1	20040527	DE 12002052535	A	20021108	200439

Priority Applications (No Type Date): DE 12002052535 A 20021108

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200443018 A1 E 34 H04L-012/56

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL  
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI  
NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG  
US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR  
GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR  
TZ UG ZM ZW

DE 1020252535 A1 H04L-012/56

Abstract (Basic): WO 200443018 A1

NOVELTY - Predetermined number of data packet of same connection  
less than or equal to maximum number of data packets are transmitted in  
one container from a transmitting station to a receiving station.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

- (1) communication system for transmitting data packet;
- (2) data packet transmitting station; and
- (3) software program product for transmission of data packet.

USE - For transmitting data packet in communication system  
(claimed) such as universal **mobile** telecommunication system (UMTS).

ADVANTAGE - Improves data packet transmission in unacknowledged  
mode transmission system without changing radio link control protocol  
for unacknowledged mode data transmission. Reduces the cost of  
improving data packet transmission and enables to decode and **decrypt**  
data transmitted on the logical channel on the receiving side even when  
more than one **media access control** protocol data unit gets lost  
during transmission or decoding process.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic  
representation of the transmission of data packet in a single  
container.

unacknowledged mode radio link control protocol data units (1-8)

**media access control** layers (10,33)

**media access control** service data units (11-18)

containers (20,29)

pp; 34 DwgNo 4/5

Title Terms: DATA; PACKET; TRANSMISSION; METHOD; COMMUNICATE; SYSTEM;  
TRANSMIT; PREDETERMINED; NUMBER; DATA; PACKET; CONNECT; LESS; EQUAL;  
MAXIMUM; NUMBER; DATA; PACKET

Derwent Class: T01; W01; W02

International Patent Class (Main): H04L-012/56

International Patent Class (Additional): H04L-009/06

File Segment: EPI

Manual Codes (EPI/S-X): T01-N02A3B; T01-S03; W01-A03B; W01-A06G2; W01-A07G;  
W01-B05A1A; W02-C03C1G

25/9/9 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016206549 \*\*Image available\*\*

WPI Acc No: 2004-364435/200434

XRPX Acc No: N04-291505

**Key generation method for data encryption in wireless local area  
network, involves combining intermediate value obtained by combining**



**secret key and user specific medium access address, with predefined key change information**

Patent Assignee: NDOSA TECHNOLOGIES INC (NDOS-N)

Inventor: PARK Y H; SHIN J G; YOU K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040083362	A1	20040429	US 2002421123	P	20021023	200434 B
			US 2003617642	A	20030711	

Priority Applications (No Type Date): US 2002421123 P 20021023; US 2003617642 A 20030711

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 20040083362	A1	15	H04L-009/00	Provisional application US 2002421123
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Abstract (Basic): US 20040083362 A1

NOVELTY - A secret key is selected and combined with a user specific **medium access control (MAC)** address to form an intermediate value. The intermediate value is combined with predefined key change information, and transformed to generate the secret keys.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) data **encryption** method; and

(2) computer program product for performing data **encryption** process.

USE - For generating data **encryption** key in wired and **wireless** local area network (LAN).

ADVANTAGE - The transmitted and received data packets are **encrypted / decrypted** efficiently. Thereby the overall **encryption** efficiency is improved, without the need to alter the data packet header.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the **encryption / decryption** system.

pp; 15 DwgNo 1/12

Technology Focus:

TECHNOLOGY FOCUS - INDUSTRIAL STANDARDS - The secret key is defined in accordance with IEEE 802.11 standard.

Title Terms: KEY; GENERATE; METHOD; DATA; **ENCRYPTION** ; **WIRELESS** ; LOCAL; AREA; NETWORK; COMBINATION; INTERMEDIATE; VALUE; OBTAIN; COMBINATION; SECRET; KEY; USER; SPECIFIC; MEDIUM; ACCESS; ADDRESS; PREDEFINED; KEY; CHANGE; INFORMATION

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-D01; T01-N02A2; T01-S03; W01-A05A; W01-A06B5A; W01-A06C4

25/9/10 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

016175220 \*\*Image available\*\*

WPI Acc No: 2004-333107/200431

XRFX Acc No: N04-265911

**Wireless network access point device for wireless local area network has management element that is physically spaced from control element, carries out network security function such as authentication function**

Patent Assignee: SYNAD TECHNOLOGIES LTD (SYNA-N)

Inventor: MORETON M J V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2394387	A	20040421	GB 200224096	A	20021016	200431 B

Priority Applications (No Type Date): GB 200224096 A 20021016

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2394387	A	35	H04L-012/28	

Abstract (Basic): GB 2394387 A

NOVELTY - The communication processor has control element (56) that is arranged with the radio transceiver, is adapted to carry out data communication functions. The management element (50) physically spaced from the control element, carries out network security function such as authentication and data **encryption** functions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) **media access control** unit; and
- (2) **wireless** network operating method.

USE - For security in **wireless** local area networks located in airports.

ADVANTAGE - Manages the various frames between the base and receiver stations efficiently.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic view of **wireless** network access point device.

pp; 35 DwgNo 8/8

Title Terms: **WIRELESS** ; NETWORK; ACCESS; POINT; DEVICE; **WIRELESS** ; LOCAL; AREA; NETWORK; MANAGEMENT; ELEMENT; PHYSICAL; SPACE; CONTROL; ELEMENT; CARRY; NETWORK; SECURE; FUNCTION; AUTHENTICITY; FUNCTION

Derwent Class: W01

International Patent Class (Main): H04L-012/28

International Patent Class (Additional): H04Q-007/24; H04Q-007/30

File Segment: EPI

Manual Codes (EPI/S-X): W01-A05; W01-A06B5A; W01-A06C4; W01-A06E

25/9/11 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016172721 \*\*Image available\*\*

WPI Acc No: 2004-330608/200430

XRPX Acc No: N04-263786

**Wireless communication system for utility services monitoring for homes, has nodes which comprise physical layer, virtual layer and application interface layer**

Patent Assignee: INPUT/OUTPUT INC (INPU-N)

Inventor: DART R P; RADCLIFFE K S

Number of Countries: 102 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200434677	A2	20040422	WO 2003US31834	A	20031006	200430 B
US 20040121786	A1	20040624	US 2002416006	P	20021004	200442
			US 2003679858	A	20031006	

Priority Applications (No Type Date): US 2002416006 P 20021004; US 2003679858 A 20031006

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 200434677 A2 E 40 H04M-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU  
ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

US 20040121786 A1 H04B-007/00 Provisional application US 2002416006

Abstract (Basic): WO 200434677 A2

NOVELTY - The **wireless** communication system has nodes which  
comprise physical layer, virtual layer and application interface layer  
(101). The physical layer has a protocol layer (103), a **media access  
control (MAC)** layer (105) and a hardware abstraction layer (107).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

- (1) **wireless** communication method; and
- (2) **wireless** communication **apparatus**.

USE - For gathering information such as seismic data, and for  
performing utility services monitoring for homes, businesses and  
municipalities, using wide area network (WAN).

ADVANTAGE - Avoids collisions and reduces the load in the network  
due to ring flooding. Reduces the variance in degree of path  
overlapping, hence improves overall network performance. Ensures  
dynamic communication routing with optimization and load balancing.  
Ensures virtual communication connections. Increases communication  
security by strong data **encryption**. Reduces communication fault  
tolerance without loss of data.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
the **wireless** communication system.

application interface layer (101)  
protocol layer (103)  
**media access control** layer (105)  
hardware abstraction layer (107)  
pp; 40 DwgNo 1/5

Title Terms: **WIRELESS**; COMMUNICATE; SYSTEM; UTILISE; SERVICE; MONITOR;  
HOME; NODE; COMPRISE; PHYSICAL; LAYER; VIRTUAL; LAYER; APPLY; INTERFACE;  
LAYER

Derwent Class: S03; W01

International Patent Class (Main): H04B-007/00; H04M-000/00

File Segment: EPI

Manual Codes (EPI/S-X): S03-C01B; W01-A06B5A; W01-C05B3F; W01-C05B5C

25/9/12 (Item 6 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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016093742 \*\*Image available\*\*

WPI Acc No: 2004-251618/200424

XRPX Acc No: N04-199511

**Broadcasting security management method in e.g. cable TV network,  
involves transmitting encoded frame containing media access control  
address from subscriber apparatus based on encoded vectors acquired from  
center apparatus**

Patent Assignee: HITACHI LTD (HITA ); TSUSHIN HOSO KIKO (TSUS-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week  
JP 2004064326 A 20040226 JP 2002218448 A 20020726 200424 B

Priority Applications (No Type Date): JP 2002218448 A 20020726

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
JP 2004064326 A 15 H04L-009/08

Abstract (Basic): JP 2004064326 A

NOVELTY - The initial vector transmitted from a center apparatus (100) is encoded with a traffic key of subscriber apparatus (110). The encoded vector is added with a frame containing a **media access control** ( **MAC** ) address from subscriber apparatus, to generate an encoded frame for the subscriber apparatus. The subscriber apparatus transmits a different encoded frame based on acquired vectors to the center apparatus.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) network system for security maintenance; and
- (2) security maintenance program.

USE - For maintaining broadcasting security in network system (claimed) e.g. cable TV network and **wireless** local area network (LAN).

ADVANTAGE - By transmitting a different **encryption** frame containing the **MAC** address from the subscriber apparatus, the tapping on the network is prevented.

DESCRIPTION OF DRAWING(S) - The figure shows an outline structure of network system. (Drawing includes non-English language text).

center apparatus (100)  
key detection unit (102)  
key generation unit (103)  
decoding unit (104)  
initial vector generation unit (107)  
encoder (108)  
subscriber apparatus (110)  
pp; 15 DwgNo 1/7

Title Terms: BROADCAST; SECURE; MANAGEMENT; METHOD; CABLE; TELEVISION;  
NETWORK; TRANSMIT; ENCODE; FRAME; CONTAIN; MEDIUM; ACCESS; CONTROL;  
ADDRESS; SUBSCRIBER; APPARATUS; BASED; ENCODE; VECTOR; ACQUIRE; APPARATUS  
Derwent Class: W01; W02  
International Patent Class (Main): H04L-009/08  
File Segment: EPI  
Manual Codes (EPI/S-X): W01-A05A; W01-A06B5A; W01-A06C4; W02-F03A;  
W02-F05A1

25/9/13 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

015747078 \*\*Image available\*\*

WPI Acc No: 2003-809279/200376

**Method for managing encryption key in wireless LAN system**

Patent Assignee: KT CORP (KTKT-N)

Inventor: JUNG H Y; PARK D G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week  
KR 2003050881 A 20030625 KR 200181419 A 20011219 200376 B

Priority Applications (No Type Date): KR 200181419 A 20011219

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
KR 2003050881 A 1 H04L-009/08

Abstract (Basic): KR 2003050881 A

NOVELTY - A method for managing an **encryption** key in a **wireless** LAN system is provided to implement the security function of a broad band **wireless** LAN by partially correcting the process related the WEP of the inner access point(AP) without having an additional key management server and also by utilizing the additional WEP key for each of the users without correcting the IEEE 802.11 protocol.

DETAILED DESCRIPTION - A method for managing an **encryption** key in a **wireless** LAN system includes the steps of: storing the master key by the access point (AP), receiving the trial of connection from the subscriber's **wireless** station and creating a wired equivalent privacy (WEP) secret key (100) to the subscriber's **wireless** station by using the **media access control (MAC)** address of the subscriber's **wireless** station to be tried to connect and the stored master key.

pp; 1 DwgNo 1/10

Title Terms: METHOD; MANAGE; **ENCRYPTION** ; KEY; **WIRELESS** ; LAN; SYSTEM

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/08

File Segment: EPI

Manual Codes (EPI/S-X): T01-C03C; T01-D01; T01-N02B1; W01-A03B; W01-A05A; W01-A06B5A; W01-A06C4X; W01-A06G2

25/9/14 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015648241 \*\*Image available\*\*

WPI Acc No: 2003-710424/200367

XRPX Acc No: N03-568006

**Storage medium access control method e.g. for magneto- optical disk, involves enciphering / deciphering data to be recorded in storage medium using key data, when key data flag is turned ON**

Patent Assignee: FUJITSU LTD (FUIT )

Inventor: ANZAI I

Number of Countries: 032 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030142822	A1	20030731	US 2002267078	A	20021008	200367 B
JP 2003223367	A	20030808	JP 200224236	A	20020131	200367
EP 1335364	A2	20030813	EP 2002256930	A	20021007	200367

Priority Applications (No Type Date): JP 200224236 A 20020131

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030142822 A1 27 H04L-009/00

JP 2003223367 A 15 G06F-012/14

EP 1335364 A2 E G11B-020/00

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Abstract (Basic): US 20030142822 A1

NOVELTY - A data key valid flag stored in a memory (7), is turned ON by a host unit (102), so as to validate the key data of a card held in a key data holding circuit (5). The data to be recorded in a storage medium is **enciphered / deciphered** using the key data, when the key

data flag is turned ON.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) storage apparatus; and
- (2) business method.

USE - For controlling access to document information, image information including movie, audio information, program information, software information including games, personal information, business information stored in storage medium e.g. magneto-optical disk used in information processing apparatus e.g. personal computer, **portable** telephone, still and/or digital camera and television.

ADVANTAGE - The illegal or unauthorized copies cannot be created, thereby security and copyright protection is enhanced.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the storage apparatus.

**enciphering / deciphering** circuit (3)  
key data holding circuit (5)  
memory (7)  
host unit (102)  
pp; 27 DwgNo 1/20

Title Terms: STORAGE; MEDIUM; ACCESS; CONTROL; METHOD; MAGNETO; OPTICAL; DISC; **ENCIPHER** ; **DECIPHER** ; DATA; RECORD; STORAGE; MEDIUM; KEY; DATA; KEY; DATA; FLAG; TURN

Derwent Class: P85; T01

International Patent Class (Main): G06F-012/14; G11B-020/00; H04L-009/00

International Patent Class (Additional): G06F-001/00; G06F-003/06;

G09C-001/00

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): T01-F05E; T01-J12C

25/9/15 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015544569 \*\*Image available\*\*

WPI Acc No: 2003-606725/200357

XRPX Acc No: N03-483748

**Interconnecting device e.g. switching hub establishes communication in computer network by allowing personal computers to communicate in network based on received media access control address of computers**

Patent Assignee: ALLIED TERRACES KK (ALTE-N); SATO T (SATO-I)

Inventor: SATO T

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030101340	A1	20030529	US 200263007	A	20020312	200357 B
JP 2003163688	A	20030606	JP 2001360467	A	20011127	200357

Priority Applications (No Type Date): JP 2001360467 A 20011127

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 20030101340	A1		17	H04L-009/00	
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JP 2003163688	A		13	H04L-012/56	
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Abstract (Basic): US 20030101340 A1

NOVELTY - The receivers in the interconnecting devices (10a,10b) receive the **media access control (MAC)** address as an identifier of personal computers (30a-30c) from respective **wireless communication devices** (40a-40c). The interconnecting devices

establishes communication in computer network (100) by allowing the personal computers to communicate in the network based on the received **MAC** address.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) computer readable medium storing communication setting program; and

(2) communication setting method.

USE - Interconnecting device such as switching hub for communication with **wireless** communication **devices** such as short distance **wireless** communication such as infrared radiation data communication such as IrDA and Bluetooth through computer network.

ADVANTAGE - Prevents unauthorized access to computer networks using the **MAC** address as device identifiers, thereby establishes communication with the interconnecting devices at high security and reliability. Since encoded and **encrypted** device identifiers are used, the disclosure of identifiers in **wireless devices** are prevented. Also since the bandwidth of the interconnecting device is increased, efficient communication is performed in the computer network.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer network.

interconnecting devices (10a,10b)

personal computer (30a-30c)

**wireless** communication **devices** (40a-40c)

computer network (100)

pp; 17 DwgNo 1/7

Title Terms: INTERCONNECT; DEVICE; SWITCH; HUB; ESTABLISH; COMMUNICATE; COMPUTER; NETWORK; ALLOW; PERSON; COMPUTER; COMMUNICATE; NETWORK; BASED; RECEIVE; MEDIUM; ACCESS; CONTROL; ADDRESS; COMPUTER

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00; H04L-012/56

International Patent Class (Additional): H04L-012/28; H04L-012/44

File Segment: EPI

Manual Codes (EPI/S-X): T01-N02A3B; T01-S03; W01-A06B5A; W01-A06C3;

W01-A06C4A; W01-A06E1; W01-A06G5A

25/9/16 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015199192 \*\*Image available\*\*

WPI Acc No: 2003-259726/200326

XRPX Acc No: N03-205912

Encrypting and decrypting information in e.g. wireless communication system using e.g. layer-2 MAC identity to form transmission encryption key

Patent Assignee: MOTOROLA INC (MOTI )

Inventor: CHATER-LEA D J; SHAHAF M

Number of Countries: 101 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2379588	A	20030312	GB 200121979	A	20010911	200326	B
WO 200324140	A2	20030320	WO 2002GB4138	A	20020911	200330	
EP 1428403	A2	20040616	EP 2002767632	A	20020911	200439	
			WO 2002GB4138	A	20020911		

Priority Applications (No Type Date): GB 200121979 A 20010911

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

GB 2379588 A 37 H04L-009/00  
WO 200324140 A2 E H04Q-007/38  
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU  
ZA ZM ZW  
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW  
EP 1428403 A2 E H04Q-007/38 Based on patent WO 200324140  
Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Abstract (Basic): GB 2379588 A

NOVELTY - Involves combining an individual identifier, e.g. layer-2  
MAC identity, related to transmission sender with a shared key to  
form a transmission **encryption** key. The key is then used to **encrypt**  
the transmission.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a  
communications system and unit.

USE - For **wireless** communications e.g. in **cellular telephone**  
network or private **mobile** network or alternatively in IP data network  
where layer-3 source ID of packet is used as key modifier.

ADVANTAGE - Does not require large numbers of shared keys to be  
simultaneously managed.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of  
the system used to implement the method.

pp; 37 DwgNo 5/5

Title Terms: INFORMATION; **WIRELESS** ; COMMUNICATE; SYSTEM; LAYER; **MAC** ;  
IDENTIFY; FORM; TRANSMISSION; **ENCRYPTION** ; KEY

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00; H04Q-007/38

International Patent Class (Additional): H04L-009/14; H04L-029/06

File Segment: EPI

Manual Codes (EPI/S-X): T01-D01; T01-N02B1; W01-A05A; W01-A07G; W01-B05A1

25/9/17 (Item 11 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014885212 \*\*Image available\*\*

WPI Acc No: 2002-705918/200276

XRPX Acc No: N02-556502

**Secure wireless local area network device e.g. laptop computer has  
cryptography circuit which renders cryptographic information unusable  
by disconnecting battery from volatile memory, responsive to tampering**

Patent Assignee: HARRIS CORP (HARO )

Inventor: BERGMAN J; DELLMO R; HALL D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020095594	A1	20020718	US 2001761173	A	20010116	200276 B

Priority Applications (No Type Date): US 2001761173 A 20010116

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020095594	A1	17	H04L-009/10	

Abstract (Basic): US 20020095594 A1



NOVELTY - A housing includes a **cryptography** circuit with a switch connected to a **wireless** transceiver, a **media access controller** . The switch disconnects battery from volatile memory rendering the **cryptography** information unusable, upon tampering the device.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Secure **wireless** local area network (LAN) system; and
- (2) Tamper resistant **wireless** local area network forming method.

USE - Secure **wireless** local area network device such as **laptop** computer.

ADVANTAGE - Provides greater security inexpensively with less complexity.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the **laptop** computer.

pp; 17 DwgNo 2/13

Title Terms: SECURE; **WIRELESS** ; LOCAL; AREA; NETWORK; DEVICE; COMPUTER; CIRCUIT; RENDER; **CRYPTOGRAPHIC** ; INFORMATION; DISCONNECT; BATTERY; VOLATILE; MEMORY; RESPOND; TAMPER

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/10

File Segment: EPI

Manual Codes (EPI/S-X): T01-M06A1A; W01-A05A; W01-A06B5A; W01-A06C4

25/9/18 (Item 12 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014815328 \*\*Image available\*\*

WPI Acc No: 2002-636034/200268

XRPX Acc No: N02-502533

**Secure wireless local area network device has cryptography circuit which is connected to medium access controller and wireless transceiver for encrypting and decrypting address and data for communication**

Patent Assignee: HARRIS CORP (HARO )

Inventor: BERGMAN J; DELLMO R; HALL D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020094087	A1	20020718	US 2001760619	A	20010116	200268 B

Priority Applications (No Type Date): US 2001760619 A 20010116

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020094087	A1	17	H04K-001/00	

Abstract (Basic): US 20020094087 A1

NOVELTY - A **cryptography** circuit (70) is connected to a **wireless** transceiver (50) and a **medium access controller** (60). The **cryptography** circuit **encrypts / decrypts** both address and the data information for transmission/reception.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a secure **wireless** local area network provision method.

USE - Secure **wireless** local area network (LAN) device.

ADVANTAGE - Provides greater security without significant increase in cost and complexity, by using the **cryptography** circuit.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of a secure **wireless** LAN device .

**Wireless** transceiver (50)

Medium access controller (60)  
Cryptography circuit (70)  
pp; 17 DwgNo 7/13  
Title Terms: SECURE; WIRELESS ; LOCAL; AREA; NETWORK; DEVICE; CIRCUIT;  
CONNECT; MEDIUM; ACCESS; CONTROL; WIRELESS ; TRANSCEIVER; ADDRESS; DATA;  
COMMUNICATE  
Derwent Class: T01; W01  
International Patent Class (Main): H04K-001/00  
File Segment: EPI  
Manual Codes (EPI/S-X): T01-D01; T01-N02A2; W01-A05A; W01-A06B5A; W01-A06C4  
; W01-A06E1

25/9/23 (Item 17 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011591137 \*\*Image available\*\*  
WPI Acc No: 1998-008266/199801  
XRPX Acc No: N98-006563

Communication, e.g. telephony, data transfer across air interface between  
satellite and ground terminal - segmenting data into partitions,  
protecting data from corruption, encrypting , interleaving to randomise  
correlated errors, and multiplexing onto physical transmission media

Patent Assignee: HUGHES ELECTRONICS (HUGA )

Inventor: LABORDE E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5689568	A	19971118	US 95496327	A	19950629	199801 B

Priority Applications (No Type Date): US 95496327 A 19950629

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5689568	A		18	H04B-007/204	

Abstract (Basic): US 5689568 A

The method of transferring communication data across an air interface comprises the steps of segmenting the communication data into 96 uniform bit partitions, and protecting the data against corruption with forward error correction using a Golay code or with CRC checksum. The communication data is then **encrypted** for confidentiality using a bit-by-bit module-2 addition (XOR) and interleaved into a 12 by 16 matrix to randomize errors.

The communication data is next multiplexed onto a RF transmission media with control data into a number of superframes, each of which includes a number of frames having a multiplicity of time slots. The control data is located within a particular one of the time slots of each frame and the communication data is located in a different one of the time slots of each frame.

USE - **Mobile** satellite system.

ADVANTAGE - Optimizes for satellite propagation delays and hides physical transmission media from higher network layers.

Dwg.9/13

Title Terms: COMMUNICATE; TELEPHONE; DATA; TRANSFER; AIR; INTERFACE;  
SATELLITE; GROUND; TERMINAL; SEGMENT; DATA; PARTITION; PROTECT; DATA;  
CORRUPT; INTERLEAVED; RANDOM; CORRELATE; ERROR; MULTIPLEX; PHYSICAL;  
TRANSMISSION; MEDIUM

Index Terms/Additional Words: **MAC** ; MEDIUM; ACCESS; CONTROL

Derwent Class: W01; W02

International Patent Class (Main): H04B-007/204

File Segment: EPI

Manual Codes (EPI/S-X): W01-B05A1A; W01-B05A1E; W02-C03B1A; W02-C03B1D;  
W02-C03C1A

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 610:Business Wire 1999-2004/Aug 19  
(c) 2004 Business Wire.  
File 369:New Scientist 1994-2004/Aug W2  
(c) 2004 Reed Business Information Ltd.  
File 370:Science 1996-1999/Jul W3  
(c) 1999 AAAS  
File 20:Dialog Global Reporter 1997-2004/Aug 19  
(c) 2004 The Dialog Corp.  
File 624:McGraw-Hill Publications 1985-2004/Aug 18  
(c) 2004 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2004/Aug 18  
(c) 2004 San Jose Mercury News  
File 647:CMP Computer Fulltext 1988-2004/Aug W2  
(c) 2004 CMP Media, LLC  
File 674:Computer News Fulltext 1989-2004/Jul W4  
(c) 2004 IDG Communications

Set	Items	Description
S1	120858	MAC OR (MEDIA? ? OR MEDIUM? ? OR MEDIASPECIFIC OR MEDIUMSPECIFIC) (1W)ACCESS??? ?(1W)(CONTROL??? ? OR CONTROLL??? ?)
S2	89534	CRYPTO OR CRYPTOGRAPH? OR CRYPTOSYSTEM? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT? OR ENCRYPT?
S3	19753	DECRYPT? OR UNENCRYPT? OR UNENCIPHER? OR UNENCYIPHER? OR DECRYPT? OR DECRYPT? OR UNCRYPT? OR UNCRYPT? OR UNCRYPT?
S4	7538429	SECRET? OR SECURE? ? OR SECURING OR SECURITY?
S5	1497884	WIRELESS? OR WIRE()LESS OR MOBILE OR LAPTOP? ? OR LAP()TOP? ? OR TABLET
S6	292229	PORTAB? OR NOTEBOOK OR NOTE()BOOK OR NOTEPAD OR THINKPAD OR (NOTE OR THINK) ()PAD
S7	365482	IPAQ OR PDD OR PDDS OR HPC OR HPCS OR WINCE OR VISOR OR PDA OR PDAS OR HANDSPRING OR PIM OR PIMS OR PALMPILOT OR PALMTOP OR PALM OR NEWTON OR BLACKBERRY
S8	8167	(PEN OR STYLUS OR POCKET) (2W) (COMPUTER? ? OR DEVICE?)
S9	64190	POCKETPC OR PERSONAL()INFORMATION()MANAGER? OR PERSONAL() (-DIGITAL OR DATA) () (ASSISTANT? ? OR ORGANIZER? ?) OR CELLPHONE? OR MOBILEPHONE? OR SCREENPHONE?
S10	573868	(RADIO OR SCREEN OR VIEW? OR SMART OR CELL OR CELLULAR OR -MOBILE OR WIRELESS? OR WIRE()LESS?? ? OR FLIP OR DIGITAL) (1W) - (TELEPHONE? OR PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S11	66733	RADIOPAGER? OR PAGER? OR PAGING(1W) (DEVICE? OR UNIT? ? OR -APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE?)
S12	249702	RADIOPHONE? OR VIEWPHONE? OR SMARTPHONE? OR RADIOTELEPHONE?
S13	44	PERSONAL()DISPLAY?() (DEVICE? OR UNIT?? OR APPARATUS? OR APP?? ? OR TERMINAL? OR APPLIANCE? OR CLIENT? ? OR PC OR PCS OR COMPUTER? ?)
S14	1960460	SELFCONTAINED OR SELF()CONTAINED OR MOBILE OR PORTABLE OR -WIRELESS? OR WIRE()LESS?? ? OR HANDHELD OR HAND()HELD OR POCKET OR IR OR INFRARED
S15	258140	S14(2W) (CLIENT? ? OR PC OR PCS OR COMPUTER? ? OR DEVICE? OR UNIT? ? OR APPARATUS?? OR APP?? ? OR ORGANIZER? OR TERMINAL? OR APPLIANCE?)
S16	13404	(VIDEO OR PICTURE OR MESSAGE OR CAMERA) (1W) (TELEPHONE? OR -PHONE? ? OR HANDSET? ? OR HAND()SET? ?)
S17	70049	PALMSIZE? OR PALMHOLD OR HANDY? ? OR FLIPPHONE? OR VIDEOPHONE? OR PICTUREPHONE?
S18	554	S1(25N)S2:S3
S19	4000	S1(25N)S5
S20	140	S18(S)S19
S21	63	S18(S) (S6:S13 OR S15:S17)

S22 161 S20:S21  
S23 133 S22/2001:2004  
S24 28 S22 NOT S23  
S25 18 RD (unique items)

25/3,K/2 (Item 2 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.

00386286 20001016290B2062 (USE FORMAT 7 FOR FULLTEXT)  
**Intersil Announces New PRISM ARM MAC Platforms For Wireless LAN Applications; Introduces new 'Access Point-on-a-chip' that reduces cost through higher integration**  
Business Wire  
Monday, October 16, 2000 08:03 EDT  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 1,063

...11a offerings, which  
will include complete chipsets, firmware, software, and radio reference designs.  
This newest **MAC** chip is based on the popular ARM9 core and is optimized for  
use in Access Points, which are basically **wireless** hubs or gateways that  
give  
users a **wireless** link to the network and Internet. The new **MAC** can be  
used in  
802.11b applications and will support mandatory data rates for 802...  
...first "Access Point-on-a-chip,"  
implementing both the 802.11 MAC protocol and the **MAC** bridging function.  
The  
ISL3856 includes an onboard Ethernet interface that supports both 10 and  
100  
Mbps data rates. It also supports 128-bit **encryption**, which offers the  
highest  
level of security for transmitted data.

Packaging, Availability and Pricing

The...

25/3,K/3 (Item 3 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.

00321370 20000717199B3124 (USE FORMAT 7 FOR FULLTEXT)  
**Buffalo Technology Launches AirStation; Affordable, Wi-Fi Compatible System Brings the Mobility, Speed and Security of Wireless Networking to the Masses**  
Business Wire  
Monday, July 17, 2000 09:05 EDT  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 542

...throughout the AirStation network are protected. These features  
include a highly secure DSSS modulation platform, **MAC** addressing that  
"closes

the door" to unregistered access, and a WEP 40-bit **wireless** packet **encryption** process that secures the data without sacrificing throughput speed.

*dup*

Standardized Networking Means Additional Flexibility

To...

25/3,K/4 (Item 4 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.

00314211 20000705187B5802 (USE FORMAT 7 FOR FULLTEXT)  
**3Com Introduces Industry's First Layer 3 Wireless LAN Security Solution**  
Business Wire  
Wednesday, July 5, 2000 15:26 EDT  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 764

...LAN. The AirConnect solution currently features Wired Equivalent Privacy (WEP) -- a standards-based Layer 2 **encryption** technique that secures data transmitted between **wireless** access points and PCs -- as well as access control using **wireless** network card ( **MAC** layer) addresses. While WEP is adequate for smaller **wireless** installations, it is not sufficiently scaleable to meet the security needs of large corporate networks...

*dup*

25/3,K/5 (Item 5 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.

00176138 20000120020B0290 (USE FORMAT 7 FOR FULLTEXT)  
**No Wires Needed Acquires \$5.5 Million in Venture Capital Funding**  
Business Wire  
Thursday, January 20, 2000 12:04 EST  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 636

...bit security architecture is the only solution in the industry that does not require bothersome **encryption** key management. The Company also has existing **medium** **access** **controller** ( 1MAC ) technology that enables the next generation of **wireless** LAN products.

In 1999, No Wires Needed enjoyed a ten-fold increase in revenue over...

25/3,K/6 (Item 6 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2004 Business Wire. All rts. reserv.

00161522 19991221355B1474 (USE FORMAT 7 FOR FULLTEXT)  
**Wave Wireless Launches Industry's Fastest 11 MBPS Wireless Products**

Business Wire

Tuesday, December 21, 1999 00:00 EST

JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

DOCUMENT TYPE: NEWSWIRE

WORD COUNT: 699

...up to 25 miles, all SPEEDLAN bridge/routers provide many features common to more expensive **wireless** bridges but at a much lower cost. Unlike many products on the market today, advanced **MAC** layer filtering, IP Routing, data **encryption** and SNMP management are all included as standard features.

SPEEDLAN products are compatible with all...

**25/3,K/9 (Item 2 from file: 20)**

DIALOG(R)File 20:Dialog Global Reporter

(c) 2004 The Dialog Corp. All rts. reserv.

12879026 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**3Com launches wireless LAN tools**

Fauziah Muhtar

NEW STRAITS TIMES (MALAYSIA)

September 18, 2000

JOURNAL CODE: FNST LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 527

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... AirConnect solution features wired equivalent privacy (WEP), a standard-based 40-bit Layer 2 data **encryption** technique and access control using **wireless** network card (**MAC** layer) addresses. byp

For corporate customers who need to deliver **wireless** connectivity to hundreds or thousands of network users, security can be scaled up by utilising...

**25/3,K/10 (Item 3 from file: 20)**

DIALOG(R)File 20:Dialog Global Reporter

(c) 2004 The Dialog Corp. All rts. reserv.

12394693 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**3COM: 3Com introduces industry's first Layer 3 wireless LAN security solution; 3Com's wireless secure tunneling solution delivers simple, seamless and scaleable wireless LAN security for commercial customers**

M2 PRESSWIRE

July 06, 2000

JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 742

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... LAN. The AirConnect solution currently features Wired Equivalent Privacy (WEP) - a standards-based Layer 2 **encryption** technique that secures data transmitted between **wireless** access points and PCs - as well as access control using **wireless** network card (**MAC** layer) addresses. byp

While WEP is adequate for smaller **wireless** installations, it is not sufficiently scaleable to meet the security needs of large corporate networks...

25/3,K/12 (Item 5 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.

04867677 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**New Low Cost, High Performance Wireless Bridge From Wave Wireless Networking**  
BUSINESS WIRE  
April 06, 1999  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 551

... of up to 25 miles, SPEEDLAN XE-2 provides many features common to more expensive **wireless** bridges but at a much lower cost. Unlike many products on the market today, advanced **MAC** layer filtering, IP Routing, data **encryption** and SNMP management are all included as standard features.

*dup*

25/3,K/14 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2004 CMP Media, LLC. All rts. reserv.

01205441 CMP ACCESSION NUMBER: NWC19991129S0008  
**Lucent WaveLAN Turbo PC Card Leads the Way in Price, Features**  
Dave Molta  
NETWORK COMPUTING, 1999, n 1024, PG22  
PUBLICATION DATE: 991129  
JOURNAL CODE: NWC LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Sneak Previews  
WORD COUNT: 1052

... configure specialized parameters using tabbed dialog boxes. I easily enabled and disabled power management and **encryption**. On the downside, Lucent makes it easy for users to change the adapter's **MAC (Media Access Control)** address, a feature I've never quite understood, given that many **wireless** access points use **MAC** - address filtering for security purposes.

*dup*

Lucent also provides client software that makes it relatively easy  
...

25/3,K/16 (Item 3 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2004 CMP Media, LLC. All rts. reserv.

01174330 CMP ACCESSION NUMBER: EET19981005S0066  
**Protocol packs wireless voice, data**  
Kevin J. Negus, Technical Co-chairman, HRFWG, Dennis Moy, Marketing Chairman, HRFWG, Hewlett-Packard Co., Palo Alto, Calif.  
ELECTRONIC ENGINEERING TIMES, 1998, n 1029, PG76  
PUBLICATION DATE: 981005  
JOURNAL CODE: EET LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Signals Focus  
WORD COUNT: 1025



... CA access mechanisms. This is derived from the IEEE 802-11.1997, "IEEE Standard for **Wireless LAN Medium Access Control** and Physical Layer Specification," that was approved in June 1997. The **MAC** protocol will accommodate up to six high-quality voice connections with 32- kbit/s ADPCM...

...24-bit network ID. In addition, users can ensure data security with three levels of **encryption** (none, medium, high).

In operation, the **MAC** protocol uses a "superframe," which incorporates two contention-free periods (CFPs) and a contention period...  
?

L Number	Hits	Search Text	DB	Time stamp
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7	99	("5539824" "6694430" "5425103" "5619576" "6304973" "6088585" "5787177" "5974149" "6189104" "5070528" "5235644" "5594869" "5757924" "5920640" "6069970" "6151679" "6240513" "5748734" "5982895" "6073237" "6169802" "6199086" "5636216" "5231662" "5764765" "6002772" "6189032" "6397336" "5628055" "5844400" "5999140" "5253294" "5499296" "5684948" "5687235" "5796833" "5818936" "5901227" "5956407" "5958051" "5974151" "6021491" "6035398" "6157721" "6160891" "6161180" "6230266" "6243812" "6292569" "6367013").pn. ("5469332" "5481611" "5513181" "5598476" "5619575" "5649014" "5952963" "5978481" "6233337" "6266411" "6266717" "6332133" "6377687" "6418224" "6430170" "6766453" "6778779" "6098330" "5664016" "6006100" "5007089" "5276680" "5247545" "5386438" "5976173".wsp "5490175" .....	USPAT	2004/08/18 11:14
Search History 8/18/2004 11:30:13 AM Page 2 C:\APPS\EAST\Workspaces\9976173.wsp 8/18/2004 11:30:13 AM				

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Search History 8/18/2004 11:30:13 AM Page 5 C:\APPS\EAST\Workspaces\09761173.wsp 8/18/2004 11:30:13 AM				

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Search History 8/18/2004 11:30:13 AM Page 6 C:\APPS\EAST\Workspaces\9976173.wsp 8/18/2004 11:30:13 AM				

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Search History 8/18/2004 11:30:13 AM Page 7 C:\APPS\EAST\Workspaces\09761173.wsp 8/24/04				



13	1900	380/28,44,247,255,30,29.ccls.	USPAT	2004/08/18 10:37
14	2602	713/201,171,158,160,200.ccls.	USPAT	2004/08/18 10:37
15	4045	(380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101	USPAT	2004/08/18 10:42
16	5	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and secur\$5 near4 wireless near4 (LAN or local adj area adj network)	USPAT	2004/08/18 10:45
17	9	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and secur\$5 with wireless with (LAN or local adj area adj network)	USPAT	2004/08/18 10:46
18	0	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and optical\$5 with crypt0\$6	USPAT	2004/08/18 10:47
19	85	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and access adj (point or station)	USPAT	2004/08/18 10:47
20	0	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and access adj (point or station)) and swlan	USPAT	2004/08/18 10:48
21	0	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and swlan	USPAT	2004/08/18 10:48
22	1	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and baseband adj processor	USPAT	2004/08/18 10:49
23	1	((380/28,44,247,255,30,29.ccls. or 713/201,171,158,160,200.ccls.) and @ad<20010101) and (housing or contain\$5) with wireless with transceiver	USPAT	2004/08/18 10:50
24	11	((housing or contain\$5) with wireless with transceiver with (LAN or local adj area adj network)	USPAT	2004/08/18 10:53
25	0	(crypto\$5 or cipher\$6 or encod\$6) with circuit with MAC with (wireless adj transceiver)	USPAT	2004/08/18 10:54
26	0	(crypto\$5 or cipher\$6 or encod\$6) with MAC with (wireless adj transceiver)	USPAT	2004/08/18 10:54
27	0	(crypto\$5 or cipher\$6 or encod\$6) with MAC with (wireless near4 transceiver)	USPAT	2004/08/18 10:54
28	0	crypt\$6 with circuit with ((media adj access adj controller) or MAC)	USPAT	2004/08/18 10:55
29	4237	(LAN or local adj area adj network) with (wireless or mobile)	USPAT	2004/08/18 10:56
30	101	((LAN or local adj area adj network) with (wireless or mobile)) and cryptography	USPAT	2004/08/18 10:56
31	98	((LAN or local adj area adj network) with (wireless or mobile)) and cryptography) and (hous\$4 or contain\$5)	USPAT	2004/08/18 10:57
32	92	((((LAN or local adj area adj network) with (wireless or mobile)) and cryptography) and (hous\$4 or contain\$5)) and @ad<20010101	USPAT	2004/08/18 10:57
33	2	((((LAN or local adj area adj network) with (wireless or mobile)) and cryptography) and (hous\$4 or contain\$5)) and @ad<20010101) and (unuseable or disable or interrupt\$5) with tamper\$6	USPAT	2004/08/18 10:58

34	99	(("5539824" "6694430" "5425103" "5619576" "6304973" "6088585" "5787177" "5974149" "6189104" "5070528" "5235644" "5594869" "5757924" "5920640" "6069970" "6151679" "6240513" "5748734" "5982895" "6073237" "6169802" "6199086" "5636216" "5231662" "5764765" "6002772" "6189032" "6397336" "5628055" "5844400" "5999140" "5253294" "5499296" "5684948" "5687235" "5796833" "5818936" "5901227" "5956407" "5958051" "5974151" "6021491" "6035398" "6157721" "6160891" "6161180" "6230266" "6243812" "6292569" "6367013").pn. ("5469332" "5481611" "5513181" "5598476" "5619575" "5649014" "5952963" "5978481" "6233337" "6266411" "6266717" "6332133" "6377687" "6418224" "6430170" "6766453" "6778779" "6098330" "5664016" "6006100" "5007089" "5276680" "5247545" "5386438" "5976173" "5490175" .....	USPAT	2004/08/18 11:15
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35	62	((("5539824" "6694430" "5425103" "5619576" "6304973" "6088585" "5787177" "5974149" "6189104" "5070528" "5235644" "5594869" "5757924" "5920640" "6069970" "6151679" "6240513" "5748734" "5982895" "6073237" "6169802" "6199086" "5636216" "5231662" "5764765" "6002772" "6189032" "6397336" "5628055" "5844400" "5999140" "5253294" "5499296" "5684948" "5687235" "5796833" "5818936" "5901227" "5956407" "5958051" "5974151" "6021491" "6035398" "6157721" "6160891" "6161180" "6230266" "6243812" "6292569" "6367013").pn. ("5469332" "5481611" "5513181" "5598476" "5619575" "5649014" "5952963" "5978481" "6233337" "6266411" "6266717" "6332133" "6377687" "6418224" "6430170" "6766453" "6778779" "6098330" "5664016" "6006100" "5007089" "5276680" "5247545" "5386438" "59761173.wsp "5490175" .....	USPAT	2004/08/18 11:15
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